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Soluble liquid formulations of quinclorac ammonium salts

The present invention relates to novel soluble liquid formulations (SL formulations) having herbicidal activity. More specifically, the present invention relates to a novel herbicidally active soluble liquid formulation comprising ammonium salts of quinclorac and at least one further herbicide C in a suitable solvent.

Quinclorac (3,7-dichloro-8-quinolinecarboxylic acid) is a known herbicide. Due to its low solubility in water (0.065 mg/kg at pH 7 at 20°C) it is usually formulated in a solid form. However, liquid formulations are sought showing an improved solubility of quinclorac and/or improved herbicidal activity.

In the case of crop protection it is desirable in principle to increase the specific activity of an active compound and the reliability of the effect. For an herbicidal composition, it is particularly desirable to control harmful plants effectively, but at the same time to be compatible with the useful plants in question. Also desirable is a broad spectrum of activity allowing the simultaneous control of harmful plants or of phytopathogenic fungi. Frequently, this cannot be achieved using a single active compound.

Thus it is one object of the present invention to provide herbicidal active mixtures and formulations having an improved efficacy against undesired weeds, preferably against small seeded broadleaf weed species, more preferably against Galium aparine.

Further, with many highly effective herbicides, there is the problem that their compatibility with useful plants, in particular dicotyledonous crop plants, such as cotton, oilseed rape and graminaceous plants, such as barley, millet, corn, rice, wheat and sugar cane, is not always satisfactory, i.e. in addition to the harmful plants, the crop plants, too, are damaged on a scale which cannot be tolerated. By reducing the application rates, the useful plants are spared; however, naturally, the extent of the control of harmful plants decreases, too.

It is known that special combinations of different specifically active herbicides result in enhanced activity of a herbicide component in the sense of a synergistic effect. In this manner, it is possible to reduce the application rates of herbicidal active compounds required for controlling the harmful plants.

Furthermore, it is known that in some cases joint application of specifically acting herbicides with other organic active compounds allows better crop plant compatibility to be achieved. In these cases, the active compounds act as antidotes or antagonists and are also referred to as safeners, since they reduce or even prevent damage to the crop plants.
Rapeseed is among the most important crop plants. Improving their growth conditions is thus an ongoing need. In the context of the present invention, the term "rapeseed" denotes both the plant itself as well as its harvested product, such rapeseed grains or seeds.

Thus it is also an object of the present invention to provide herbicidal active mixtures and formulations which are highly active against unwanted harmful plants in crops, preferably in brassica crop species, more preferably in rapeseed cultures, particularly preferred in oilseed rape and canola.

It has been found, surprisingly, that soluble liquid (SL) formulations comprising

A) quinclorac ammonium salts of formula I

\[
\text{Cl} \quad \begin{array}{c}
\text{Cl} \\
\text{O} \\
\text{N}\text{R}^1\text{R}^2\text{R}^3\text{R}^4
\end{array}
\]  \hspace{1cm} (I)

wherein
\( R^1, R^2, R^3 \text{ and } R^4 \) are independently hydrogen, \( \text{Cl}-\text{C}_6 \) -alkyl,
\(-\text{CH}(\text{R}^a\text{CH} R^b\text{Z}_1)\text{H} \text{ or } -\text{CH}(\text{R}^a\text{CH} R^b\text{CH} R^c\text{CH} R^d\text{Z}_2)\text{H} \) (wherein \( R^a, R^b, R^c \text{ and } R^d \) are independently hydrogen or \( \text{Cl}-\text{C}_6 \) -alkyl, wherein \( Z_1 \text{ and } Z_2 \) are independently \( \text{O, NH or N-Cl-C}_6 \) -alkyl, and wherein \( x \) and \( y \) are independently an integer from 1 to 6);

B) a solvent of formula IIA

\[
\text{R}^5 \quad \begin{array}{c}
\text{A} \\
\text{OH}
\end{array}
\]  \hspace{1cm} (IIA)

wherein
\( R^5 \) is \( \text{d-Ce-alkyl} \);
\( A \) is \( \text{Cl-C}_6 \) -alkylene or \( \text{Cl-C}_6 \) -oxyalkylene; and
\( m \) is 0, 1, 2 or 3;

and/or a solvent of formula IIB

\[
\text{HO-B-OH} \]  \hspace{1cm} (IIB)

wherein
\( B \) is a straight-chain or branched \( \text{C}_2-\text{C}_6 \) -alkylene or \( \text{C}_2-\text{C}_4 \) -alkyleneoxy-\( \text{C}_2-\text{C}_4 \) -alkylene or \( \text{C}_2-\text{C}_3 \) -alkyleneoxy-\( \text{C}_2-\text{C}_3 \)-alkyleneoxy-\( \text{C}_2-\text{C}_3 \)-alkylene;
and

C) at least one further herbicidal active ingredient C selected from the group consisting of c1) to c2):
   c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors); and
   c2) glutamine synthetase inhibitors;
   including their agriculturally acceptable salts or derivatives;

achieve these objectives.

The solvents of formula IIa and/or lib provide adequate solubility of the quinclorac ammonium salts of formula I and the at least one further herbicide C.

Moreover, the use of the solvents of formula IIa and/or lib has been found to result in very good stability of the quinclorac ammonium salts of formula I and the at least one further herbicide C in solution.

In addition the herbicidal activity of these liquid formulations is increased.

The combination of quinclorac ammonium salts of formula I with at least one further herbicidal active ingredient C provides an improved efficacy against undesired weeds, preferably against small seeded broadleaf weed species, more preferably against Galium aparine.

The present invention also relates to herbicidal active mixtures comprising at least one quinclorac ammonium salt of formula I as described herein and at least one further herbicide C selected from the group consisting of c1) to c2):
   c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors); and
   c2) glutamine synthetase inhibitors;
   including their agriculturally acceptable salts or derivatives, as described herein.

The present invention also relates to the use of soluble liquid formulations comprising at least one quinclorac ammonium salt of formula I and at least one further herbicide C in a suitable solvent, or of compositions comprising at least one quinclorac ammonium salt of formula I and at least one further herbicide C for controlling undesired vegetation in crops, especially in rapeseed cultures.
The invention furthermore relates to a method for controlling undesired vegetation in crops, especially in rapeseed cultures, which method comprises allowing an effective amount of an SL formulation or herbicidal mixture as defined above or below to act on crop plants or parts thereof, preferably rapeseed plants or parts thereof, and/or the environment where the crops, preferably the rapeseed cultures, grow or are to grow. The crop, preferably the rapeseed, might be resistant to one or more herbicides or to attack by insects owing to genetic engineering or breeding.

If the components A, B and/or C are capable of forming geometrical isomers, for example E/Z isomers, both the pure isomers and mixtures thereof may be used in the SL formulations according to the invention.

The preferred embodiments of the invention mentioned herein below have to be understood as being preferred either independently from each other or in combination with one another.

In a preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

\[ R^1 \] is hydrogen or \( \text{Cl}_{-6} \)-alkyl;

\[ R^2, R^3 \] are independently \( \text{Cl}_{-6} \)-alkyl; and

\[ R^4 \] is hydrogen.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

\[ R^1 \] is hydrogen, methyl or ethyl;

\[ R^2, R^3 \] are independently methyl or ethyl; and

\[ R^4 \] is hydrogen.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

\[ R^1, R^4 \] are hydrogen; and

\[ R^2, R^3 \] are independently \( \text{Cl}_{-6} \)-alkyl.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

\[ R^1, R^4 \] are hydrogen; and

\[ R^2, R^3 \] are independently methyl or ethyl.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R^1$ is hydrogen or C6-alkyl; and
- $R^2$, $R^3$ are independently $-(\text{CHR}^a-\text{CHR}^b-\text{CHR}^c-\text{CHR}^d)_{x} \cdot H$ or $-(\text{CHR}^a-\text{CHR}^b-\text{CHR}^c-\text{CHR}^d)_{y} \cdot H$ (wherein $R^a$, $R^b$, $R^c$ and $R^d$ are independently hydrogen or C6-alkyl, wherein $Z_1$ and $Z_2$ are independently O, NH or N-C6-alkyl, and wherein $x$ and $y$ are independently an integer from 1 to 6);
- $R^4$ is hydrogen.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R^1$ is hydrogen or C6-alkyl;
- $R^2$ is $-(\text{CHR}^a-\text{CHR}^b-\text{CHR}^c-\text{CHR}^d)_{x} \cdot H$ or $-(\text{CHR}^a-\text{CHR}^b-\text{CHR}^c-\text{CHR}^d)_{y} \cdot H$ (wherein $R^a$, $R^b$, $R^c$ and $R^d$ are independently hydrogen or C6-alkyl, wherein $Z_1$ and $Z_2$ are independently O, NH or N-C6-alkyl, and wherein $x$ and $y$ are independently an integer from 1 to 6; preferably wherein $Z_1$ and $Z_2$ are O); especially $-(\text{CH}_2-\text{CH}_2-0)_{x} \cdot H$ or $-(\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-0)_{y} \cdot H$ and wherein $m$ and $n$ are independently an integer from 1 to 6; and
- $R^3$, $R^4$ are hydrogen.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R^1$ is hydrogen, methyl or ethyl;
- $R^2$ is C6-hydroxyalkyl or C6-hydroxyalkoxy-C6-alkyl; and
- $R^3$, $R^4$ are hydrogen.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R^1$, $R^2$, $R^4$ are hydrogen; and
- $R^2$ is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R^1$, $R^2$, $R^4$ are hydrogen; and
- $R^2$ is 2-(2-hydroxyethoxy)ethyl.
The SL formulation according to the present invention comprises as component B) a solvent of formula Ila and/or a solvent of formula lib.

In a preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula Ila.

In another preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula Ila, wherein

\[ R^5 \]

and A have the meanings as given above.

In another preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula Ila, wherein

\[ A \text{ is methylene, ethylene or oxyethylene;} \]

\[ m = 0; \text{ and} \]

\[ R^5 \]

has the meaning as given above.

In another preferred embodiment of the invention the SL formulation comprises as component B) only benzyl alcohol.

In another preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula lib.

In another preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula lib wherein

\[ B \text{ is a straight-chain or branched C2-Cs-alkylene or C2-C4-alkyleneoxy-C2-C4-alkylene.} \]

In another preferred embodiment of the invention the SL formulation comprises as component B) only a solvent of formula lib wherein

\[ B \text{ is ethylene, propylene or ethylenoxyethylene.} \]

In another preferred embodiment of the invention the SL formulation comprises as component B) only glycol (ethylene glycol; HO-CH2CH2-OH).

In another preferred embodiment of the invention the SL formulation comprises as component B) a solvent of formula Ila and a solvent of formula lib.

In another preferred embodiment of the invention the SL formulation comprises as component B)
a solvent of formula Ila wherein
m is 0;
R5 and A have the meanings as given above; and
a solvent of formula lib wherein

B is a straight-chain or branched C2-C8-alkylene or C2-C4-alkyleneoxy-C2-C4-alkylene.

In another preferred embodiment of the invention the SL formulation comprises as component B)
a solvent of formula Ila wherein
A is C1-C6-alkylene or C1-C6-oxyalkylene;
m is 0;
R5 has the meanings as given above; and
a solvent of formula lib wherein
B is ethylene, propylene or ethyleneoxyethylene.

In another preferred embodiment of the invention the SL formulation comprises as component B) benzyl alcohol and glycol.

The SL formulation according to the present invention comprises in addition to components A) and B) one or more (at least one) additional herbicidal active ingredient(s) C [component(s) C; herbicide(s) C] selected from the group consisting of c1) to c2):
c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors);
and
c2) glutamine synthetase inhibitors;
including their agriculturally acceptable salts or derivatives.

Preferred herbicides C which can be used in the SL formulation according to the present invention are:
c1) from the group of the EPSP synthase inhibitors: glyphosate;
c2) from the group of the glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives.

If the components C have ionizable functional groups, they can also be employed in the form of their agriculturally acceptable salts. Suitable are, in general, the salts of those cations and the acid addition salts of those acids whose cations and anions, respectively, have no adverse effect on the activity of the active compounds.
Preferred cations are the ions of the alkali metals, preferably of lithium, sodium and potassium, of the alkaline earth metals, preferably of calcium and magnesium, and of the transition metals, preferably of manganese, copper, zinc and iron, further ammonium and substituted ammonium in which one to four hydrogen atoms are replaced by Cl-C₄ alkyl, hydroxy-Cl-C₄ alkyl, Cl-C₄ -alkoxy-Cl-C₄ alkyl, hydroxy-Cl-C₄ -alkoxy-Cl-C₄ alkyl, phenyl or benzyl, preferably ammonium, methylammonium, isopropylammonium, dimethylammonium, diisopropylammonium, trimethylammonium, heptylammonium, dodecylammonium, tetradeacylammonium, tetramethylammonium, tetraethylammonium, tetrabutylammonium, 2-hydroxyethylammonium (olamine salt), 2-(2-hydroxyeth-1-ox)ethyl-1-ylammonium (diglycolamine salt), di(2-hydroxyeth-1-yl)ammonium (diolamine salt), tris(2-hydroxyethyl)ammonium (trolamine salt), tris(2-hydroxypropyl)ammonium, benzyltrimethylammonium, benzyltriaethylammonium, N,N,N-trimethylethanolammonium (choline salt), furthermore phosphonium ions, sulfonium ions, preferably tri(Cl-C₄ alkyl)sulfonium, such as trimethylsulfonium, and sulfoxonium ions, preferably tri(Cl-C₄ alkyl)sulfoxonium, and finally the salts of polybasic amines such as N,N-bis-(3-amino propyl)methyamine and diethylenetriamine.

Anions of useful acid addition salts are primarily chloride, bromide, fluoride, iodide, hydrogensulfate, methylsulfate, sulfate, dihydrogenphosphate, hydrogenphosphate, nitrate, bicarbonate, carbonate, hexafluorosilicate, hexafluorophosphate, benzoate and also the anions of Cl-C₄ -alkanoic acids, preferably formate, acetate, propionate and butyrate.

Active components C having a carboxyl group can be employed in the form of the acid, in the form of an agriculturally suitable salt as mentioned above or else in the form of an agriculturally acceptable derivative in the compositions according to the invention, for example as amides, such as mono- and di(Cl-C₆ alkyl)amides or arylamides, as esters, for example as allyl esters, propargyl esters, Cl-C₆ alkyl esters, alkoxyalkyl esters, tefuryl ((tetrahydrofuran-2-yl)methyl) esters and also as thioesters, for example as Cl-C₆ alkylthio esters. Preferred mono- and di(Cl-C₆ alkyl)amides are the methyl and the dimethylamides. Preferred arylamides are, for example, the anilides and the 2-chloroanilides. Preferred alkyl esters are, for example, the methyl, ethyl, propyl, isopropyl, butyl, isobutyl, pentyl, mexyl (1-methylhexyl), meptyl (1-methylheptyl), heptyl, octyl or isoctyl (2-ethylhexyl) esters. Preferred Cl-C₄ -alkoxy-Cl-C₄ alkyl esters are the straight-chain or branched Cl-C₄ -alkoxy ethyl esters, for example the 2-methoxyethyl, 2-ethoxyethyl, 2-butoxyethyl (butyl), 2-butoxypropyl or 3-butoxypropyl ester. An example of a straight-chain or branched Cl-C₆ alkylthio ester is the ethylthio ester.

Suitable salts of glyphosate are for example glyphosate-ammonium, glyphosate-diammonium, glyphosate-dimethylammonium, glyphosate-isopropylammonium, glyphosate-potassium, glyphosate-sodium, glyphosate-trimesium as well as the ethanolamine
and diethanolamine salts, preferably glyphosate-diammonium, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate).

A suitable salt of glufosinate is for example glufosinate-ammonium.
A suitable salt of glufosinate-P is for example glufosinate-P-ammonium.

Particularly preferred herbicides C (components C) which can be used in the SL formulation according to the present invention are selected from the group consisting of:

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of:

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glufosinate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glufosinate-isopropylammonium and glufosinate-ammonium.

According to a specific embodiment of the invention, the SL formulation comprises in addition to components A) and B) at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium.

According to another specific embodiment of the invention, the SL formulation comprises in addition to components A) and B) at least one, preferably exactly one compo-
component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium.

According to another specific embodiment of the invention, the SL formulation comprises in addition to components A) and B) at least two, preferably exactly two components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.
According to another specific embodiment of the invention, the SL formulation comprises in addition to components A) and B) at least two, preferably exactly two components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives; particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); most preferred selected from glyphosate-isopropylammonium.

and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives; particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

R¹, R⁴ are hydrogen; and
R², R³ are independently C₁-C₆-alkyl;

as component B) only a solvent of formula Il wherein
A is C₁-C₆-alkylene or C₁-C₆-oxyalkylene; and
m is 0; and

as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
 especially preferred selected from the group consisting of
 5  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
 c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
 more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
 most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein
 R¹, R⁴ are hydrogen; and
 R², R³ are independently Cl-C₆-alkyl;
 20 as component B) only a solvent of formula IIa wherein
 A is methylene, ethylene or oxyethylene; and
 m is 0; and
 as component C) at least one herbicide selected from the group consisting of
 25 c1) EPSP synthase inhibitors: glyphosate; and
 c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
 including their agriculturally acceptable salts or derivatives;
 particularly preferred selected from the group consisting of
 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
 30 c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
 especially preferred selected from the group consisting of
 35 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
 c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
 more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R_1, R_3, R_4$ are hydrogen;
- $R_2$ is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl;

as component B) only a solvent of formula Il wherein

- $A$ is $C_1-C_6$-alkylene or $C_1-C_6$-oxyalkylene;
- $m$ is 0; and

as component C) at least one herbicide selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate; and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

- $R_1, R_3, R_4$ are hydrogen;
- $R_2$ is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl;

as component B) only a solvent of formula Il wherein

- $A$ is methylene, ethylene or oxyethylene;
- $m$ is 0; and

as component C) at least one herbicide selected from the group consisting of...
c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

R¹, R⁴ are hydrogen;

R², R³ are independently C₁-C₆-alkyl;

as component B) only a solvent of formula lib wherein

B is a straight-chain or branched C₂-C₅-alkylene or C₂-C₄-alkyleneoxy-C₂-C₄-alkylene; and

as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

\[ R^1, R^4 \text{ are hydrogen; } \]

\[ R^2, R^3 \text{ are independently } C_1-C_6 \text{-alkyl; } \]

as component B) only a solvent of formula \( \text{lib} \) wherein

\[ B = \text{ethylene, propylene or ethyleneoxyethylene; and } \]

as component C) at least one herbicide selected from the group consisting of

\[ \text{c1) EPSP synthase inhibitors: glyphosate; and } \]

\[ \text{c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P; } \]

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

\[ \text{c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, } \]

\[ \text{glyosate-potassium and glyphosate-trimesium (sulfosate); and } \]

\[ \text{c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, } \]

\[ \text{glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; } \]

especially preferred selected from the group consisting of

\[ \text{c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and } \]

\[ \text{glyosphate-trimesium (sulfosate); and } \]

\[ \text{c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; } \]

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein
R¹, R³, R⁴ are hydrogen;
R² is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl;
as component B) only a solvent of formula II wherein
B is a straight-chain or branched C2-Cs-alkylene or C2-C4-alkyleneoxy-C2-C4-
alkylene; and
as component C) at least one herbicide selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate; and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate
  and glufosinate-P;
  including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium,
glyposate-potassium and glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;
especially preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as
component A) a quinclorac ammonium salt wherein
R¹, R³, R⁴ are hydrogen;
R² is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl;
as component B) only a solvent of formula II wherein
B is ethylene, propylene or ethyleneoxyethylene; and
as component C) at least one herbicide selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate; and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate
  and glufosinate-P;
  including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium,
glyposate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of:

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein
   R¹, R⁴ are hydrogen;
   R², R³ are independently C₁-C₆-alkyl;
as component B) benzyl alcohol and glycol; and
as component C) at least one herbicide selected from the group consisting of:
   c1) EPSP synthase inhibitors: glyphosate; and
   c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of:
   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
   c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of:
   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
   c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) a quinclorac ammonium salt wherein

R^1, R^3, R^4 are hydrogen;
R^2 is 2-hydroxyethyl or 2-(2-hydroxyethoxy)ethyl;

as component B) benzyl alcohol and glycol; and

as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and at
least one, preferably exactly one component C selected from the group of c1): EPSP
synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and at
least one, preferably exactly one component C selected from the group of c2): gluta-
mine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
inecluding their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glusofosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
   preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
   preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
   most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); most preferred selected from glyphosate-isopropylammonium; and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives; particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and as component C) at least one herbicide selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol and as component C) at least one herbicide selected from the group consisting of:

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of:

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of:

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol and at least one, preferably exactly one component C selected from the group of:

c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol and at least one, preferably exactly one component C) selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol and at least one, preferably exactly one, components C) different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and
glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
   preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
   including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
   glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   especially preferred selected from glufosinate, glufosinate-P, glufosinate-
   ammonium and glufosinate-P-ammonium;
   more preferred selected from glufosinate-ammonium and glufosinate-P-
   ammonium;
   most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-
   potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium
   and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-
   trimesium (sulfosate);
   most preferred selected from glyphosate-isopropylammonium; and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
   glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
   ammonium;
   especially preferred selected from glufosinate, glufosinate-P, glufosinate-
   ammonium and glufosinate-P-ammonium;
   more preferred selected from glufosinate-ammonium and glufosinate-P-
   ammonium;
   most preferred selected from glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2-(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and as component C) at least one herbicide selected from the group consisting of

5  c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
   including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from the group consisting of
10  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
   c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
15  especially preferred selected from the group consisting of
   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
   c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
20  more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
25  most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2-(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

30  preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   most preferred selected from glyphosate-isopropylammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
  especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
  more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
  most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and at least two, preferably exactly two, components C different from each other, wherein

- the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
  - particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
  - especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
  - more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
  - most preferred selected from glyphosate-isopropylammonium;
  - and
  - the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
    - particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
    - especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
    - more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
    - most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and as component C) at least one herbicide selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate; and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glycosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2-(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol and at least two, preferably exactly two, components C different from each other, wherein

the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2-(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from glyphosate including its agriculturally acceptable salts or derivatives; particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); most preferred selected from glyphosate-isopropylammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives; particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from glufosinate-ammonium.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium.

The invention the SL formulation may also comprise in addition to components A), B) and C) one or more co-solvents.

Suitable co-solvents are protic solvents, like water, alcohols and polyoles, as well as dipolar aprotic solvents like ethers, ketones, lactones, carbonates, amides and lactames.

Examples for suitable co-solvents are

- water;
- alcohols like Ci-Cs alkanones such as methanol, ethanol, n-propanol, isopropanol, n-butanol, isobutanol, 2-butanol, tert.-butanol, pentanol, isoamyl alcohol, n-hexanol, 1-methylpentanol, 1-ethylbutanol, n-octanol, 2-ethylhexanol and the like; Cs-Cs cycloalkanols such as cyclopentanol, cyclohexanol and the like; polyhydric alcohols, such as sorbitol and the like; alkylene glycol monomethyl ethers such as ethylene glycol monomethyl ether, propylene glycol monomethyl ether and the like; di- and tri-C2-C4-alkylene glycol monomethyl ethers such as diethylglycol monomethyl ether, dipropylene glycol monomethyl ether and the like;
- polyols like glycerine and the like;
- ethers like cyclic ethers which may contain an OH group such as tetrahydrofuran, pyran, dioxan, tetrahydrofurufurol and the like; alkylene glycol dimethyl ethers such as ethylene glycol dimethyl ether, propylene glycol dimethyl ether.
and the like; di- and tri-C2-C4-alkylene glycol dimethyl ethers such as diethylene glycol dimethyl ether, dipropylene glycol dimethyl ether and the like;

- ketones, having from 3 to 8 C-atoms and optionally a hydroxyl group, such as acetone, methylethyl ketone, methylpropyl ketone, methyl-4-hydroxybutyl ketone, cyclopentanone, cyclohexanone, diaceton alcohol, mesityloxide;

- lactones, having from 3 to 8 C-atoms, such as D-propiolactone, \(-\) butyrolactone,

- carbonates, in particular dimethylcarbonat, diethylcarbonat and 2-oxa-1,3-dioxolan;

- amides such as dimethylformamide, dimethylacetamid,

- lactames, having preferably from 3 to 6 carbon atoms and their N-methyl and N-ethyl derivatives, such as pyrrolidin-2-one, N-methylpyrrolidin-2-one, N-ethyl-pyrrolidin-2-one and the like.

The especially preferred co-solvent is water.

In a preferred embodiment of the invention the SL formulation comprises in addition to components A), B) and C) as defined above, preferably as defined above as preferred, one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises in addition to components A) and B) as defined above, preferably as defined above as preferred, at least one component C) selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate; and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
- c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium; and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of

- EPSP synthase inhibitors: glyphosate; and
- glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of

- EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
- glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

- EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
- glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium; and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at
least one, preferably exactly one component C selected from the group of c2): glutamine
synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium
and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at
least two, preferably exactly two, components C different from each other, wherein at
least one component C is selected from the group of c1): EPSP synthase inhibitors
including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at
least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one co-solvent, especially water.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein

the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of

5  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

10 especially preferred selected from the group consisting of
   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

15 more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

20 and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

30 particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group
of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) benzyl alcohol, and at least one, preferably exactly one component C selected from
the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts
or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particullarly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) benzyl alcohol, and at least two, preferably exactly two, components C different from
each other, wherein at least one component C is selected from the group of c1): EPSP
synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particullary preferred selected from glyphosate, glyphosate-isopropylammonium,
glyosphate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) benzyl alcohol, and at least two, preferably exactly two, components C different from
each other, wherein at least one component C is selected from the group of c2): glutamine
synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein

the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfsate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfsate), glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium; and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfsate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfsate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfsate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;

most preferred selected from glufosinate-ammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) glycol, and at least two, preferably exactly two, components C different from each 
other, wherein at least one component C is selected from the group of c1): EPSP syn-

thase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or 
derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, 
glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium 
and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) glycol, and at least two, preferably exactly two, components C different from each 
other, wherein at least one component C is selected from the group of c2): glutamine 
synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, 
including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-
ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;

most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein
the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of
   c1) EPSP synthase inhibitors: glyphosate; and
   c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) benzyl alcohol and glycol, and at least one, preferably exactly one component C
selected from the group of c1): EPSP synthase inhibitors including their agriculturally
acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) benzyl alcohol and glycol, and at least one, preferably exactly one component C
selected from the group of c2): glutamine synthase inhibitors including their agriculturally
acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one co-solvent, especially water.

The SL formulation of the invention may also comprise in addition to components A), B) and C) one or more formulation additives, such as surfactants, defoamers, preservatives, colorants, stabilizers and the like.

Suitable surfactants are

anionic surfactants such as the alkali metal salts, alkaline earth metal salts, in particular the sodium, potassium and calcium salts, and ammonium salts of
- alkylsulfonates, such as lauryl sulfonate, isotridecylsulfonate,
alkylsulfates, in particular fatty alcohol sulfates, such as lauryl sulfate, isotridecylsulfate, cetyl sulfate, stearyl sulfate;
- aryl- and alkylarylsulfonates, such as napthylsulfonate, dibutylnaphtylsulfonate, dodecylphenylether sulfonate, cumylsulfonate, nonylbenzenesulfonate, dodecyl benzene sulfonate;
- sulfonates of fatty acids and fatty acid esters;
- sulfates of fatty acids and fatty acid esters;
- sulfates of ethoxylated alkanols, such as sulfates of ethoxylated lauryl alcohol;
- sulfates of alkoxylated alkylphenols;
- alkyl phosphates, C8-C16 alkyl phosphates;
- dialkylphosphates, C8-C16 dialkyl phosphates;
- dialkylesters of sulfosuccinic acid, such as dioctyl sulfosuccinate,
- acylsarcosinates,
- fatty acids, such as stearates,
- acyl glutamates,
- ligninsulfonates,
- condensates of naphthalinesulfonic acid or phenolsulfonic acid with formaldehyde;
- phosphate esters of alkoxylated alkanols or block copolymers based on EO/PO;

non-ionic surfactants, such as
- ethoxylated alkanols, in particular ethoxylated fatty alcohols and ethoxylated oxoalcohols, such as ethoxylated lauryl alcohol, ethoxylated isotridecanol, ethoxylated cetyl alcohol, ethoxylated stearyl alcohol, and esters thereof, such as acetates;
- ethoxylated alkylphenols, such as ethoxylated nonylphenyl, ethoxylated dodecylphenyl, ethoxylated isotridecylphenol and the esters thereof, e.g. the acetates;
- alkylglucosides and alkyl polyglucosides;
- ethoxylates of fatty acids;
- partial esters, such as mono-, di- and triesters of fatty acids with glycerin or Sorbitan, such as glycerin monostearate, sorbitanmonooleat, sorbitantristearate;
- ethoxylated esters of fatty acids with glycerin or sorbitan, such as ethoxylated glycerin monostearate;
- ethoxylates of vegetable oils or animal fats, such as corn oil ethoxylate, castor oil ethoxylate, tallow oil ethoxylate;
- ethoxylates of fatty amines, fatty amides or of fatty acid diethanolamides;
- alkoxylated EO/PO polymers;

and
cationic surfactants, such as
- quaternary ammonium compounds, in particular alkyltrimethylammonium salts and dialkyldimethylammonium salts, e.g. the halides, sulfates and alkylsulfates;
- pyridinium salts, in particular alkylpyridinium salts e.g. the halides, sulfates and C1-C4-alkylsulfates; and
- imidazolinium salts in particular N,N'-dialkylimidazolinium salts, e.g. the halides, sulfates or methoxulfates;

or mixtures thereof.

Suitable defoamers include polysiloxanes, such as polydimethyl siloxane.

Suitable preservatives to prevent microbial spoiling of the compositions of the invention include formaldehyde, alkyl esters of p-hydroxybenzoic acid, sodium benzoate, 2-bromo-2-nitropropane-1,3-diol, o-phenylphenol, thiazolinones, such as benzisothiazolinone, 5-chloro-2-methyl-4-isothiazolinone, pentachlorophenol, 2,4-dichlorobenzyl alcohol and mixtures thereof.

Suitable stabilizers comprise e.g. UV-absorbers such as cinnamic esters, 3,3-diphenyl-2-cyano acrylates, hydroxy and/or alkoxy substituted benzophenones, N-(hydroxyphenyl)-benzotriazoles, hydroxyphenyl-s-triazines, oxalic amides and salicylates, e.g. the UVINUL® 3000, 3008, 3040, 3048, 3049, 3050, 3030, 3035, 3039, 3088, UVINUL® MC80 and radical scavengers, e.g. ascorbic acid, sterically hindered amines (HALS-compounds) such as UVINUL® 4049H, 4050H and 5050H, and the like and anti-oxidants such as vitamin E.

In a preferred embodiment of the invention the SL formulation comprises in addition to components A), B) and C) as defined above, preferably as defined above as preferred, one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises in addition to components A) and B) as defined above, preferably as defined above as preferred, at least one component C) selected from the group consisting of
- c1) EPSP synthase inhibitors: glyphosate; and
- c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of
- c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

5 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

10 c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of

20 c1) EPSP synthase inhibitors: glyphosate; and

25 c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

30 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

35 c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

40 and one or more formulation additives, especially one surfactant.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
 particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
 particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
 particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
even more preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac dimethylammonium, as component B) glycol, and at least 
two, preferably exactly two, components C different from each other, wherein at least 
one component C is selected from the group of c1): EPSP synthase inhibitors including 
their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or 
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, 
glyphosate-potassium and glyphosate-trimesium (sulfosate);

and one or more formulation additives, especially one surfactant.
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate; and c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and
glycol, and at least one, preferably exactly one component C selected from the group
of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or deriv-
atives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and
glycol, and at least one, preferably exactly one component C selected from the group
of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or
derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,  
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;

most preferred selected from glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as  
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and  
glycol, and at least two, preferably exactly two, components C different from each oth-
er, wherein at least one component C is selected from the group of c1): EPSP syn-
thase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or  
derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium,  
glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium  
and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as  
component A) quinclorac dimethylammonium, as component B) benzyl alcohol and  
glycol, and at least two, preferably exactly two, components C different from each oth-
er, wherein at least one component C is selected from the group of c2): glutamine syn-
thase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,  
including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,  
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein
the first of the two or more, preferably exactly two, components C is selected from
 glyphosate including its agriculturally acceptable salts or derivatives;
  particularly preferred glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate);
  especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
  most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from
 bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
  particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
  especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
  most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
 including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

5 In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein
the first of the two or more, preferably exactly two, components C is selected from
glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
and the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and
glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium,
glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium
and glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) glycol, and at least one, preferably exactly one component C selected from the
group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or
derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) glycol, and at least one, preferably exactly one component C selected from the
group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or
derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium; and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives; particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); most preferred selected from glyphosate-isopropylammonium; and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate; and c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P; including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

5 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate- 
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C
different from each other, wherein at least one component C is selected from the group 
of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or deriv-
atives;
preferably selected from glyphosate including its agriculturally acceptable salts or 
derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium,
glyosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium 
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C
different from each other, wherein at least one component C is selected from the group 
of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or 
derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P,
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium,
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2-(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein
the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
and one or more formulation additives, especially one surfactant.

The SL formulation of the invention may also comprise in addition to in addition to components A), B) and C) as defined above, preferably as defined above as preferred, one co-solvent as defined above, especially water, and one or more formulation additives as defined above, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises in addition to components A) and B) as defined above, preferably as defined above as preferred, at least one component C) selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of

5 c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

10 especially preferred selected from the group consisting of

15 c1) EPSP synthase inhibitors: glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

20 one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as

25 component A) quindorac dimethylammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of

30 particularly preferred selected from the group consisting of

35 c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

40 including their agriculturally acceptable salts or derivatives;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium; one co-solvent, especially water; and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from glyphosate including its agriculturally acceptable salts or derivatives; particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); most preferred selected from glyphosate-isopropylammonium; one co-solvent, especially water; and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives; particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from glufosinate-ammonium; one co-solvent, especially water; and one or more formulation additives, especially one surfactant.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
   preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   most preferred selected from glyphosate-isopropylammonium;
   one co-solvent, especially water; and
   one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
   particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
   especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
   most preferred selected from glyphosate-isopropylammonium; and
   the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
   particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
   more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium; 
one co-solvent, especially water; and 
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of 
c1) EPSP synthase inhibitors: glyphosate; and 
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of 
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate); and 
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of 
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and 
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and

c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulphosate);  
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particular preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives; preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particular preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulphosphate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulphosphate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulphosate);
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac dimethylammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and as component C) at least one herbicide selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate; and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from the group consisting of
  c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
  c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-\[2(2\text{-}\text{hydroxyethoxy})\text{-}ethyl\]-ammonium, as component B) benzyl alcohol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-\[2(2\text{-}\text{hydroxyethoxy})\text{-}ethyl\]-ammonium, as component B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives; 
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, 
including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, 
glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-
ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-
ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as 
component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component 
B) benzyl alcohol, and at least two, preferably exactly two, components C different from each other, wherein
the first of the two or more, preferably exactly two, components C is selected from 
glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyposate-
potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium 
and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-
trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from 
bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally ac-
ceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and as component C) at least one herbicide selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate; and c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P; including their agriculturally acceptable salts or derivatives; particularly preferred selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyposalate-potassium and glyphosate-trimesium (sulfosate); and c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; especially preferred selected from the group consisting of c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium; more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium; most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium; one co-solvent, especially water; and one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component
B) glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least one, preferably exactly one component C selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
epecially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;
preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and
the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and as component C) at least one herbicide selected from the group consisting of

c1) EPSP synthase inhibitors: glyphosate; and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), glufosinate and glufosinate-P;

including their agriculturally acceptable salts or derivatives;

particularly preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from the group consisting of
c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate); and
c2) glutamine synthase inhibitors: glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from the group consisting of glyphosate-isopropylammonium, glyphosate-trimesium (sulfosate), glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from the group consisting of glyphosate-isopropylammonium and glufosinate-ammonium;
one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.
In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least one, preferably exactly one component C selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

- preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;
- particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);
- especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
- more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
- most preferred selected from glyphosate-isopropylammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C

- preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;
- particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
- especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
- more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
- most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C
different from each other, wherein at least one component C is selected from the group of c1): EPSP synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from glyphosate including its agriculturally acceptable salts or derivatives;

particularly preferred selected from glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate);

especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);

most preferred selected from glyphosate-isopropylammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein at least one component C is selected from the group of c2): glutamine synthase inhibitors including their agriculturally acceptable salts or derivatives;

preferably selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;

more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;

most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and

one or more formulation additives, especially one surfactant.

In another preferred embodiment of the invention the SL formulation comprises as component A) quinclorac mono-[2(2-hydroxyethoxy)-ethyl]-ammonium, as component B) benzyl alcohol and glycol, and at least two, preferably exactly two, components C different from each other, wherein the first of the two or more, preferably exactly two, components C is selected from glyphosate including its agriculturally acceptable salts or derivatives;
particularly preferred glyphosate, glyphosate-isopropylammonium, glyposate-potassium and glyphosate-trimesium (sulfosate);
especially preferred selected from glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
more preferred selected from glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate);
most preferred selected from glyphosate-isopropylammonium; and

the second of the two or more, preferably exactly two, components C is selected from bilanaphos (bialaphos), glufosinate and glufosinate-P, including their agriculturally acceptable salts or derivatives;

particularly preferred selected from bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
especially preferred selected from glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium;
more preferred selected from glufosinate-ammonium and glufosinate-P-ammonium;
most preferred selected from glufosinate-ammonium;

one co-solvent, especially water; and
one or more formulation additives, especially one surfactant.

The amount of the quinclorac ammonium salt of formula I in the SL formulation of the invention usually ranges from 1 to 40 % by weight, preferably from 5 to 30 % by weight and in particular from 10 to 20 % by weight based on the total weight of said formulation.

The amount of the solvent of formula IIa and/or lib in the SL formulation of the invention usually ranges from 10 to 95 % by weight, preferably from 20 to 70 % by weight and in particular from 30 to 60 % by weight based on the total weight of said formulation.

The SL formulation of the present invention may also comprise one or more additional herbicidal active ingredients, especially in an amount from 1 to 40 % by weight, preferably from 2 to 30 % by weight and in particular from 2 to 25 % by weight (based on the total weight of said formulation).

The SL formulation of the present invention may also comprise one or more co-solvents, especially in an amount from 10 to 90 % by weight, preferably from 30 to 60 % by weight and in particular from 40 to 50 % by weight based on the total weight of said formulation.
The SL formulation of the present invention may also comprise one or more formulation additives, especially in an amount from 0.1 to 20 % by weight based on the total weight of said formulation.

The SL formulation according to the present invention can be prepared by adding the quinclorac ammonium salt of formula I and the additional herbicidal active ingredient(s) C, co-solvent(s) and if desired the formulation additive(s) to the solvent of formula IIa and/or lib, while stirring, and, optionally while heating.

It is also possible that some of the components of the SL formulation are premixed and the remaining components are added thereafter while stirring, and, optionally while heating.

In another embodiment the SL formulation can be prepared by mixing together quinclorac "acid", an amine of formula III

$$NR_1^1R_2^2R_3^3$$  \(\text{III}\)

wherein the meaning of \(R_1\), \(R_2\) and \(R_3\) are those given for the quinclorac ammonium salt of formula I.

and, if desired one or more additional herbicidal active ingredients and/or one or more solvents and/or one or more formulation additives, wherein the amounts of quinclorac "acid" and of the amine of formula III are from 0.8 : 1 to 1.2 : 1 mol %, and the amounts of other components are as desired.

Especially quinclorac "acid" and the amine of formula III are used in equimolar amounts.

In case one of the additional herbicidal active ingredients is also used in its \([NRiR2R3H]^+\) form the respective "neutral form" of the additional herbicidal active ingredient may be mixed together with the other components as mentioned above and an additional respective amount of the amine of formula III, which is in the range of from 0.8 : 1 to 1.2 : 1 mol %.

In a preferred embodiment the additional herbicidal active ingredient and the additional amount of amine of formula III are used in an equimolar ratio.

In a special embodiment the amine of formula III is used as aqueous solution.
If desired, the additional herbicidal active ingredients and the formulation additives may be contained within the SL formulation of the present invention. However, it is also possible to add these components after dilution with water to the ready-to-use aqueous composition.

Upon dilution with water, the SL formulation of the invention forms an aqueous herbicide composition which comprises a quinclorac ammonium salt of formula I, a solvent of formula IIa and/or lib, water and optionally one or more additional herbicidal active ingredients, and/or one or more co-solvents and/or one or more formulation additives.

In order to obtain these aqueous herbicide compositions, the SL formulation of the invention are usually diluted with at least 1 parts of water, preferably at least 20 parts of water, in particular at least 40 parts of water and more preferably at least 80 parts of water (all parts are given in parts by weight) (based on the total weight of the aqueous herbicide compositions).

Dilution will be usually achieved by pouring the SL formulations of the invention into water. Usually, dilution is achieved with agitation, e.g. with stirring, to ensure a rapid mixing of the concentrate in water. However, agitation is not necessary. Though the temperature of mixing is not critical, mixing is usually performed at temperatures ranging from 0 to 100°C, in particular from 10 to 50°C or at ambient temperature.

The water used for mixing is usually tap water. However the water may already contain further compounds which are used in plant protection, e.g. nutrificants, fertilizers, water soluble pesticides or alkylates of vegetable oils, such as methylated seed oil (MSO), preferably MSO. It is also possible that the SL formulation is mixed with water and if desired one or more of said further compounds which are used in plant protection, e.g. nutrificants, fertilizers, water soluble pesticides or alkylates of vegetable oils, such as methylated seed oil (MSO), are added.

If desired, MSO is employed in amounts from 0.125 to 5 % by volume, preferably from 0.25 to 2.5 % by volume and in particular from 0.5 to 1 % by volume (based on the total volume of the aqueous herbicide compositions = final volume for application).

The aqueous herbicide compositions of the invention can be used as such to control undesired vegetation. Therefore, the present invention also relates to an aqueous herbicide composition which is obtained by diluting the SL formulation of the present invention with water and optionally with further compounds which are used in plant protection, e.g. nutrificants, fertilizers, water soluble pesticides or alkylates of vegetable oils, such as methylated seed oil (MSO).
In a preferred embodiment of the aqueous herbicide compositions the SL formulation is diluted with water only.

In a further preferred embodiment of the aqueous herbicide compositions the SL formulation is diluted with water and alkylates of vegetable oils, especially MSO.

In a further preferred embodiment of the aqueous herbicide compositions the SL formulation is diluted with water and alkylates of vegetable oils, especially MSO, only.

The present invention also relates to the use of said aqueous herbicide compositions for control of undesired vegetation by contacting the undesired plants, their habitat and/or their seeds with an effective amount of an aqueous herbicidal composition as described herein.

The compositions of the invention after dilution are applied by usual means which are familiar to a skilled person.

The present invention also relates to herbicidal active mixtures comprising at least one quinclorac ammonium salt of formula I as described herein and at least one further herbicide C selected from the group consisting of c1) to c2):

   c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors); and
   c2) glutamine synthetase inhibitors;

including their agriculturally acceptable salts or derivatives, as described above.

With regard to the preferred embodiments of the quinclorac ammonium salt of formula I, the preferences as mentioned hereinbefore are fully applicable.

With regard to the preferred embodiments of the herbicide C, the preferences as mentioned hereinbefore are fully applicable.

The compounds of formula I can be prepared by mixing together quinclorac "acid" and an amine of formula III

\[ NR^1 R^2 R^3 \quad \text{III} \]

wherein the meaning of \( R^1, R^2 \) and \( R^3 \) are those given for the quinclorac ammonium salt of formula I. The reaction may be performed in substance or in an appropriate solvent, for example water, an alcohol, like methanol and ethanol, a ketone, like acetone, diethylketone.
The herbicides C of groups c1) to and c2) are known herbicides, see, for example, The Compendium of Pesticide Common Names (http://www.alanwood.net/pesticides/).

According to one embodiment, individual components of the herbicidal active mixtures according to the invention such as parts of a kit or parts of a binary mixture may be mixed by the user himself in a spray tank and further auxiliaries may be added, if appropriate.

In a further embodiment, either individual components of the herbicidal active mixtures according to the invention or partially premixed components, e.g. agrochemical components comprising compounds I and/or active substances from the group C may be mixed by the user in a spray tank and further auxiliaries and additives may be added, if appropriate.

In a further embodiment, either individual components of the herbicidal active mixtures according to the invention or partially premixed components, e.g. components comprising compounds I and/or active substances from the group C, can be applied jointly (e.g. after tank mix) or consecutively.

The active compound A and the at least one further active compound C can be formulated and applied jointly or separately, simultaneously or in succession, before, during or after the emergence of the plants. In case of separate application, the order of the application of the active compounds A and C is of minor importance. The only thing that is important is that the at least one active compound A and the at least one further active compound C are present simultaneously at the site of action, i.e. are at the same time in contact with or taken up by the plant to be controlled.

In the case of separate application it is of minor importance, in which order the application takes place. It is only necessary, that the herbicide compound A and the herbicide compound C are applied in a time frame that allows simultaneous action of the active ingredients on the plants, preferably within a time-frame of at most 14 days, in particular at most 7 days.

Accordingly, a first embodiment of the invention relates to compositions in the form of a crop protection composition formulated as a 1-component composition comprising the at least one active compound of formula I or the at least one active compound of formula I (active compound A) and at least one further active compound selected from the herbicides C.

Accordingly, a second embodiment of the invention relates to compositions in the form of a crop protection composition formulated as a 2-component composition comprising a first formulation (component) comprising the at least one active compound A, and a second component comprising at least one further active compound selected from the herbicides C.
Usually the application rate of the quinclorac ammonium salt of formula I, calculated on the basis of the quinclorac "acid", is in the range of 20 to 1700 g ai/ha, preferably 20 to 500 g ai/ha, particularly preferred 20 to 200 g ai/ha, especially preferred 50 to 200 g ai/ha.

Usually the application rate of glyphosate, its salts, esters and/or amids, calculated on the basis of the glyphosate "acid", is in the range of 300 to 1000 g ai/ha, preferably 450 to 900 g ai/ha, particularly preferred 450 to 600 g ai/ha.

Usually the application rate of bilanaphos (bialaphos), its salts, esters and/or amids, calculated on the basis of the bilanaphos (bialaphos) "acid" is in the range of 300 to 1000 g ai/ha, preferably 450 to 900 g ai/ha, particularly preferred 450 to 600 g ai/ha.

Usually the application rate of glufosinate or glufosinate-P, and their salts, esters and/or amids, calculated on the basis of the glufosinate "acid" and the glufosinate P "acid" respectively, is in the range of 300 to 1000 g ai/ha, preferably 450 to 900 g ai/ha, particularly preferred 500 to 600 g ai/ha.

A SL formulation represents a liquid, homogeneous formulation. Usually the active ingredients of the SL formulation is/are dissolved in water or a combination of water and suitable water soluble solvent(s) plus optionally other ingredients. The dilution of a SL formulation with water results in a clear solution.

The herbicidal active mixtures and formulations according to the present invention have an improved efficacy against undesired weeds, preferably against small seeded broadleaf weed species, more preferably against Galium aparine.

The SL formulation and the compositions according to the present invention are are highly active against unwanted harmful plants in crops, preferably in brassica crop species, more preferably in rapeseed cultures, particularly preferred in oilseed rape and canola. Thus they are especially useful in plant protection of rapeseed. The term "plant" as used herein includes all parts of a plant such as germinating seeds, emerging seedlings and herbaceous vegetation including all belowground portions (such as the roots) and aboveground portions.

Rapeseed (Brassica napus) is also known as rape, oilseed rape, rapa, rappi, rapeseed, colza and, in the case of one particular group of cultivars, canola. In the terms of the
present invention, "rapeseed" is used as a synonym for all these terms, inclusive canola, as well as other cultivated Brassica species, such as for example field mustard (Brassica campestris) or Indian mustard (Brassica juncea).

The SL formulation and the compositions according to the invention can also be used in genetically modified rapeseed plants. The term "genetically modified plants" is to be understood as plants whose genetic material has been modified by the use of recombinant DNA techniques to include an inserted sequence of DNA that is not native to that plant species’ genome or to exhibit a deletion of DNA that was native to that species’ genome, wherein the modification(s) cannot readily be obtained by cross breeding, mutagenesis or natural recombination alone. Often, a particular genetically modified plant will be one that has obtained its genetic modification(s) by inheritance through a natural breeding or propagation process from an ancestral plant whose genome was the one directly treated by use of a recombinant DNA technique. Typically, one or more genes have been integrated into the genetic material of a genetically modified plant in order to improve certain properties of the plant. Such genetic modifications also include but are not limited to targeted post-translational modification of protein(s), oligo- or polypeptides, e.g., by inclusion therein of amino acid mutation(s) that permit, decrease, or promote glycosylation or polymer additions such as prenylation, acetylation farnesylation, or PEG moiety attachment.

Rapeseed plants as well as the propagation material of said plants, which can be treated with the inventive mixtures include all modified non-transgenic plants or transgenic plants, e.g. crops which tolerate the action of herbicides or fungicides or insecticides owing to breeding, including genetic engineering methods, or plants which have modified characteristics in comparison with existing plants, which can be generated for example by traditional breeding methods and/or the generation of mutants, or by recombinant procedures.

For example, the SL formulation and the compositions according to the present invention can be applied (as seed treatment, foliar spray treatment, in-furrow application or by any other means) also to plants which have been modified by breeding, mutagenesis or genetic engineering including but not limiting to agricultural biotech products on the market or in development (cf. http://www.bio.org/speeches/pubs/er/agri_products.asp).

Rapeseed plants that have been modified by breeding, mutagenesis or genetic engineering, e.g. have been rendered tolerant to applications of specific classes of herbicides, such as auxinic herbicides such as dicamba or 2,4-D; bleacher herbicides such as 4-hydroxyphenylpyruvate dioxygenase (HPPD) inhibitors or phytoene desaturase (PDS) inhibitors; acetolactate synthase (ALS) inhibitors such as sulfonylureas or imidazolinones, e.g. imazamox; enolpyruvyl shikimate 3-phosphate synthase (EPSP) in-
hibitors such as glyphosate or sulfosate; glutamine synthetase (GS) inhibitors such as
glufosinate or bialafos; protoporphyrinogen-IX oxidase (PPO) inhibitors; lipid biosyn-
thesis inhibitors such as acetylCoA carboxylase (ACCase) inhibitors; or photosynthetic
electron transport inhibitors at the photosystem II receptor site, such as bromoxynil,
oxynil, atrazine, simazine or terbutylazine as a result of conventional methods of
breeding or genetic engineering; furthermore, plants have been made resistant to mul-
tiple classes of herbicides through multiple genetic modifications, such as resistance to
both glyphosate and glufosinate or to both glyphosate and a herbicide from another
class such as ALS inhibitors, HPPD inhibitors, auxinic herbicides, or ACCase inhibitors.

These herbicide resistance technologies are, for example, described in Pest Manage-
ment Science 61, 2005, 246; 61, 2005, 258; 61, 2005, 277; 61, 2005, 269; 61, 2005,
286; 64, 2008, 326; 64, 2008, 332; Weed Science 57, 2009, 108; Australian Journal of
Agricultural Research 58, 2007, 708; Science 316, 2007, 1185; and references quoted
therein. Several cultivated plants have been rendered tolerant to herbicides by mut-
genesis and conventional methods of breeding, e.g., Clearfield® summer rape (Canola,
BASF SE, Germany) being tolerant to imidazolinones, e.g., imazamox. Genetic
engineering methods have been used to render rapeseed plants tolerant to herbicides
such as glyphosate, imidazolinones and glufosinate, some of which are under devel-
opment or commercially available under the brands or trade names RoundupReady®,
(glyphosate tolerant, Monsanto, USA) and LibertyLink® (glufosinate tolerant, Bayer
CropScience, Germany). Preferably, the rapeseed plants are tolerant against herbi-
cides selected from the group of photosynthetic electron transport inhibitors at the phos-
tosystem II receptor site, e.g. atrazine, simazine, terbutylazine or bromoxynil or its agri-
culturally acceptable esters; acetolactate synthase inhibitors (ALS inhibitors), e.g. ima-
 zamox or its agriculturally acceptable salts; auxinic herbicides, e.g. 2,4-D, dicamba and
their agriculturally acceptable salts, esters and amides; EPSP synthase inhibitors, e.g.
glyphosate, sulfosate and their agriculturally acceptable salts; and glutamine synthase
inhibitors, e.g. glufosinate, bialafos and their agriculturally acceptable salts.

Furthermore, rapeseed plants are also covered that are by the use of recombinant
DNA techniques capable to synthesize one or more insecticidal proteins, especially
those known from the bacterial genus Bacillus, particularly from Bacillus thuringiensis,
such as delta-endotoxins, e.g., Cry1A(b), Cry1A(c), Cry1F, Cry1F(a2), Cry1A(b), Cry1I(A,
Cry1I(B(b)) or Cry9c; vegetative insecticidal proteins (VIP), e.g., VIP1, VIP2, VIP3 or
VIP3A; insecticidal proteins of bacteria colonizing nematodes, e.g., Photorhabdus spp.
or Xenorhabdus spp.; toxins produced by animals, such as scorpion toxins, arachnid
toxins, wasp toxins, or other insect-specific neurotoxins; toxins produced by fungi, such
as Streptomyces toxins, plant lectins, such as pea or barley lectins; agglutinins; pro-
teinase inhibitors, such as trypsin inhibitors, serine protease inhibitors, patatin, cystatin
or papain inhibitors; ribosome-inactivating proteins (RIP), such as ricin, maize-RIP,
abrins, luffin, saporin or bryodin; steroid metabolism enzymes, such as 3-
hydroxy-steroid oxidase, ecdysteroid-IDP-glycosyl-transferase, cholesterol oxidases,
ecdysone inhibitors or HMG-CoA-reductase; ion channel blockers, such as blockers of
goat or calcium channels; juvenile hormone esterase; diuretic hormone receptors
(helicokinin receptors); stilbene synthase, bibenzyl synthase, chitinases or glucanases.
In the context of the present invention these insecticidal proteins or toxins are to be
understood expressly also as including pre-toxins, hybrid proteins, truncated or other-
wise modified proteins. Hybrid proteins are characterized by a new combination of pro-
tein domains, (see, e.g., WO 02/015701). Further examples of such toxins or genet-
ically modified plants capable of synthesizing such toxins are disclosed, e.g., in EP-A
and WO 03/52073. The methods for producing such genetically modified plants are
generally known to the person skilled in the art and are described, e.g., in the publica-
tions mentioned above. These insecticidal proteins contained in the genetically modi-
fied plants impart to the plants producing these proteins tolerance to harmful pests
from all taxonomic groups of arthropods, especially to beetles (Coleoptera), two-
winged insects (Diptera), and moths (Lepidoptera) and to nematodes (Nematoda). Ge-
etically modified plants capable to synthesize one or more insecticidal proteins are, e.
g., described in the publications mentioned above.

Furthermore, rapeseed plants are also covered that are by the use of recombinant
DNA techniques capable to synthesize one or more proteins to increase the resistance
or tolerance of those plants to bacterial, viral or fungal pathogens. Examples of such
proteins are the so-called "pathogenesis-related proteins" (PR proteins, see, e.g., EP-A
392 225), plant disease resistance genes or T4-lysozym. The methods for producing
such genetically modified plants are generally known to the person skilled in the art
and are described, e.g., in the publications mentioned above.

Furthermore, rapeseed plants are also covered that are by the use of recombinant
DNA techniques capable to synthesize one or more proteins to increase the productivi-
ty (e.g., bio-mass production, grain yield, starch content, oil content or protein content),
tolerance to drought, salinity or other growth-limiting environmental factors or tolerance
to pests and fungal, bacterial or viral pathogens of those plants.

Furthermore, plants are also covered that contain by the use of recombinant DNA
 techniques a modified amount of ingredients or new ingredients, specifically to improve
human or animal nutrition, e.g., oil crops that produce health-promoting long-chain
omega-3 fatty acids or unsaturated omega-9 fatty acids (e.g., Nexera® rape, Dow
AgroSciences, Canada).

Furthermore, plants are also covered that contain by the use of recombinant DNA
techniques a modified amount of ingredients or new ingredients, specifically to improve
raw material production.
The SL formulation and the compositions to be used according to the invention are suitable as herbicides. They are suitable as such or as an appropriately formulated composition. The compositions according to the invention control vegetation on non-crop areas very efficiently, especially at high rates of application. They act against broad-leaved weeds and grass weeds in rapeseed crops without causing any significant damage to the crop plants. This effect is mainly observed at low rates of application.

The following examples are intended to further illustrate the present invention.

Biological tests

Field trials were conducted using tank mixtures of Liberty Link® (LL) herbicide with ACCORD® 75DF or ACCORD® 180SL at the rates specified in Table A below. In all cases MERGE® adjuvant was included as part of the tank mix application.

Applications were made post-emergence using small plot research sprayers with a variety of nozzles ranging from fine to course droplet size and were applied with a water volume of 100 L/ha (unless otherwise noted).

All trials utilized a randomized complete block design with four replications. Since evaluations were made at various intervals not common to all trials, the specific rating intervals are specified in Table A as days after treatment (DAT).

Efficacy for herbicide treatments was evaluated using visual assessments expressed as percent (%) weed control compared to an untreated weedy check. 100 means no emergence of the plants, or complete destruction of at least the above-ground parts, and 0 means no damage or normal course of growth.

Table A. GALAP control in Liberty Link Canola by post-emergence treatment by glufosinate (Liberty Link®) in combination with either quinclorac (ACCORD® 75DF) or quinclorac ammonium salt (ACCORD® 180SL).

<table>
<thead>
<tr>
<th>Example</th>
<th>Treatment</th>
<th>Rate (g ai/ha / L/ha)</th>
<th>Damage of GALAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example 1 (comparative)</td>
<td>LIBERTY® 150SL + ACCORD® 75DF + MERGE</td>
<td>500 + 50 + 1'</td>
<td>82.6</td>
</tr>
</tbody>
</table>
Example 2 (according to the invention) | LIBERTY® 150SL + ACCORD® 180SL + MERGE® | 500 + 50 + 1* | 88.9 | 90.0
--- | --- | --- | --- | ---

| GALAP | Galium aparine L. (cleaver) |
| Liberty Link® Canola | glufosinate-resistant canola |
| LIBERTY® 150 SL | glufosinate ammonium and adjuvants |
| ACCORD® 75 DF | quinclorac and adjuvants |
| ACCORD® 180 SL | quinclorac dimethylammonium and adjuvants |
| MERGE® Adjuvant | surfactant blend and petroleum hydrocarbons. |

These data clearly demonstrate that the treatment by glufosinate in combination with quinclorac ammonium salt provided increased cleaver control over the treatment by glufosinate in combination with quinclorac in form of the free acid.
Claims:

1. A soluble liquid (SL) formulation comprising

   A) a quinclorac ammonium salt of formula I

   
   
   
   
   
   
   wherein

   R¹, R², R³ and R⁴ are independently hydrogen, Ci-C6-alkyl,

   - (CH R⁵(CH R⁶-Zi )x·H or -(CH R⁵(CH R⁶-CH R⁷-CH R⁸-CH R⁹-Z₂)y·H

   (wherein R⁵, R⁶, R⁷ and R⁸ are independently hydrogen or
   Ci-C6-alkyl, wherein Z₁ and Z₂ are independently O, NH or
   N-Ci-C6-alkyl, and wherein x and y are independently an
   integer from 1 to 6);

   B) a solvent of formula lla

   
   
   
   
   

   wherein

   R⁵ is d-Ce-alkyl;

   A is Ci-C6-alkylene or Ci-C6-oxyalkylene; and

   m is 0, 1, 2 or 3;

   and/or a solvent of formula lib

   
   

   wherein

   B is a straight-chain or branched C2-Cs-alkylene or C2-C4-
   alkyleneoxyz-C2-C4-alkylene or C2-C3-alkyleneoxyz-C2-C3-
   alkyleneoxyz-C2-C3-alkylene;

   and

   C) at least one further herbicides selected from the group consisting of c1) to

   c2):

   c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP
   inhibitors); and
c2) glutamine synthetase inhibitors; including their agriculturally acceptable salts or derivatives.

2. A SL formulation according to Claim 1 wherein

R¹ is hydrogen or Ci-C6-alkyl;
R², R³ are independently Ci-C6-alkyl;
R⁴ is hydrogen.

3. A SL formulation according to Claim 1 wherein

R¹, R⁴ are hydrogen;
R², R³ are independently Ci-C6-alkyl.

4. A SL formulation according to Claim 1 wherein the quinclorac ammonium salt of formula (I) is quinclorac dimethylammonium.

5. A SL formulation according to Claims 1 to 4 comprising as component B a solvent of formula IIa or a solvent of formula lib.

6. A SL formulation according to Claims 1 to 5 wherein the solvent is a solvent of formula IIa.

7. A SL formulation according to Claims 1 to 5 wherein the solvent is a solvent of formula lib.

8. A SL formulation according to Claims 1 to 5 and 7 wherein B is a straight-chain or branched C2-Cs-alkylene.

9. A SL formulation according to Claims 1 to 8 wherein component C is selected from the group consisting of

   c1) glyphosate; and
   c2) bilanaphos (bialaphos), glufosinate and glufosinate-P; including their agriculturally acceptable salts or derivatives.

10. A SL formulation according to Claims 1 to 9 wherein component C is selected from the group consisting of

   c1) EPSP synthase inhibitors: glyphosate, glyphosate-isopropylammonium, glyphosate-potassium and glyphosate-trimesium (sulfosate); and
   c2) glutamine synthetase inhibitors: bilanaphos (bialaphos), bilanaphos-sodium, glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium.
11. A SL formulation according to Claims 1 to 10 wherein component C is selected from the group consisting of glyphosate, glyphosate-isopropylammonium and glyphosate-trimesium (sulfosate).

12. A SL formulation according to Claims 1 to 10, wherein component C is selected from the group consisting of glufosinate, glufosinate-P, glufosinate-ammonium and glufosinate-P-ammonium.

13. A method for controlling undesirable vegetation, which comprises diluting a herbicidal active amount of the SL formulation as claimed in Claims 1 to 12 with water, and allowing said diluted formulation to act on plants, their habitat and/or their seeds.

14. Herbicidal active mixtures comprising at least one quinclorac ammonium salt of formula I as claimed in any one of claims 1 to 4 and at least one further herbicide C selected from the group consisting of c1) to c2):
  c1) enolpyruvyl shikimate 3-phosphate synthase inhibitors (EPSP inhibitors); and
  c2) glutamine synthetase inhibitors;
including their agriculturally acceptable salts or derivatives.

15. Herbicidal active mixtures as claimed in claim 14, wherein component C is selected from the group consisting of
  c1) glyphosate; and
  c2) bilanaphos (bialaphos), glufosinate and glufosinate-P;
including their agriculturally acceptable salts or derivatives.
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. □ Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. □ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. X As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. □ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.: 

4. □ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 

Remark on Protest

- □ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

- □ The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

- □ No protest accompanied the payment of additional search fees.
INTERNATIONAL SEARCH REPORT

PCT/EP2013/056890

A. CLASSIFICATION OF SUBJECT MATTER

INV. A01N43/42 A01N57/20 A01N25/02 A01P13/00

ADD.

According to International Patent Classification (IPC) onto both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>Y</td>
<td>wo 2009/013120 A2 (BASF SE [DE]; BERGAUS RAINER [DE]; TERRY CANNAN [US]; ZAWI ERUCHA JOSE) 29 January 2009 (2009-01-29) page 1, line 16 - page 2, line 23 page 9, lines 7-22 examples 1-10 -----</td>
<td>1-15</td>
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<td>X</td>
<td>wo 2005/087007 AI (MONSANTO TECHNOLOGY LLC [US]; BECHER DAVID Z [US]; AGBAJE HENRY E [US]) 22 September 2005 (2005-09-22) paragraphs [0001], [0009] - [0015], [0018], [0041], [0042]; examples 19; tables 19a, 19b -----</td>
<td>14, 15</td>
</tr>
</tbody>
</table>

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents : 

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"A" document member of the same patent family

Date of the actual completion of the international search

8 August 2013

Date of mailing of the international search report

19/08/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Fax. (+31-70) 340-3016

Authorized officer

Klaver, Jos

Form PCT/ISA/210 (second sheet) (April 2005)
<table>
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<tr>
<td>Y</td>
<td>DATABASE STN CHEMICAL ABSTRACT [Online] 1997, SANKULA ET AL: &quot;Glufosinate-resistant, BAR-transformed rice (Oryza sativa) and red rice (Oryza sativa) response to glufosinate alone and in mixtures&quot;, XP002126150, retrieved from STN CHEMICAL ABSTRACT Database access on no. 128-71921 abstract</td>
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| Y        | & S. SANKULA ET AL.: "Glufosinate-resistant, BAR-transformed rice (Oryza sativa) and red rice (Oryza sativa) response to glufosinate alone and in mixtures",
<p>| X        | wo 02/12165 AI (ISHIHARA SANGYO KAISHA [JP] ; HAGA TAKAHIRO [US] ; CROSBY KEVIN B [US] ); 14 February 2002 (2002-02-14) page 1, lines 4-5 page 2, paragraph 5 - page 3, paragraph 2 tables 1-5 Table 6: combination 6-56 --- | 14, 15 |</p>
<table>
<thead>
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<th>Category</th>
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<tr>
<td>Y</td>
<td>EP 0 060 429 A1 (BASF AG [DE]) 22 September 1982 (1982-09-22) page 2, lines 19-21 example 75 page 37, lines 32-35</td>
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This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13

   Soluble liquid formulation comprising A) quinclorac ammonium salt, B) solvent of formula (Ila) and/or (lib) and C) further herbicide selected from EPSP- and glutamine synthase inhibitors

2. claims: 14, 15

   Herbicidal mixture comprising quinclorac ammonium salt and herbicide selected from EPSP- and glutamine synthase inhibitors

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