DYE LEVELLER CONTAINING AN ANIONIC OR NON-IONIC DETERGENT WITH A FOAM DEPRESSANT MIXTURE OF AN ALKYL ESTER OF AN ALKANOLIC ACID, AN ALKYL PHOSPHATE, AND A FATTY ACID OR SOAP

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ABSTRACT OF THE DISCLOSURE

The invention depresses foaming of non-ionic and anionic detergents in a reactive dye or vat dye bath by adding 0.05 to 4 parts of an alkyl ester of an alkanolic acid wherein at least one of the alkyl radicals of the ester shows at least one ramification of 1 to 4 carbon atoms, 0.05 to 2 parts of a 4-8 carbon alkyl phosphate, 0.05 to 1 part of a fatty acid or soap per 10 parts of the non-ionic and/or anionic detergent. Ethylene and/or propylene oxide condensates of fatty alcohols and 4-9 carbon alkyl substituted phenol, fatty alcohol sulfates, sulfonate condensation products of fatty acids with taunins and hydroxyethyl succinic acid including urethane sulfonates, and other alkyl and aryl sulphonates. An example of the detergent is a suppressed foam forming tendencies shows a mixture of 57% condensation of 8 moles of ethylene oxide and isostri-decyl alcohol, 2.8%

Now, we have found that as wetting agent showing a levelling action and reduced formation of foam, there may be used...
of foam reducing agents must be watched constantly and, if necessary, further amounts must be added. These
inconveniences are eliminated when using the mixtures ac-
cording to the invention which are distinguished by a
levelling action.
When dyeing yarns, for example a cotton yarn, on the
hank dyeing machine the combinations according to the
invention offer another surprising advantage in that they
prevent the yarns from floating at the surface of the dye-
bath. The known disadvantage of this undesired floating,
i.e., the uneven dying of the upper portions of the float-
ing yarn, is thus avoided, too. The same applies to the
dyeing of piece goods in the winch vat where up to
now the floating of the goods caused uneven wetting with
the dyestuff and thus uneven dyeings, and even entangle-
ment of the fabric webs. In order to prevent the yarns
from floating at the surface of the bath it is advantageous
to add to the dyebaths mixtures according to the invention
containing as wetting agents oxalkylates and sulfonates.
In the preliminary wetting of cross-wound bobbins of
dry cotton yarn the combination according to the inven-
tion shows a particularly rapid wetting-through activity
which can be seen from the rapid and foamless replace-
ment of the air contained in the yarn by the wetting
liquor.
In the wetting baths or dyebaths the mixtures accord-
ing to the invention are generally used in concentra-
tions from about 0.2 to about 10 grams per liter.
As known high-molecular oxalkylates (component (d)) for the mixtures according to the invention there may be
used, for example, products which are prepared on a large scale in industry by addition of about 6 to
about 30 mols of ethylene oxide and/or propylene oxide
to aliphatic alcohols having from about 8 to about 18
carbon atoms, for example fatty alcohols of natural
origin or oxo-alcohols. Moreover, there may also be
used the corresponding oxethylates of aliphatic-aromatic
hydroxy compounds such, for example, as alkylphenols
having one or several, in particular branched, alkyl rad-
icals of about 4 to 9 carbon atoms. Suitable high-mole-
cular oxalkylates, are for example: p-nonylphenol nona-
ediene-glycol ether, tri-isobutylphenol octa-deca-ethyl-
eneglycol ether, dodecyl alcohol deca-ethylene-glycol
ether, p-nonylphenol-eicosane-ethylen ether, tri-isobutyl-
phenol-triacetanate-ethylene glycol ether, oxo-tridecyl al-
cohol octa-ethylene-glycol ether. It is advantageous to
use combinations of oxalkylates of aliphatic and aliphatic-
aromatic compounds, especially the mixture of tridecyl
alcohol octaethylene-glycol ether, and 2,4,6-tri-isobutyl-
phenol-triacetanate-ethylene-glycol ether. There may also
be used the known fatty acid polyglycol esters. Further-
more, the oxalkyl ether chains may, to a certain extent,
carry methyl or ethyl side-chains formed by the partial
replacement of ethylene oxide by propylene and/or butyl-
enyl oxide. As high-molecular oxalkylates are generally
suitable those which in a 1% aqueous solution show tur-
bidity points of at least 30°C.
As salts of alkylsulfuric acid esters (component (d))
there may be used the alkali metals salts of sulfuric acid
esters of aliphatic alcohols having from about 8 to 18
carbon atoms, such, for example, as sulfuric acid esters of
fatty alcohols of natural origin or oxo-alcohols. The
sulfonates which may be used as component (d) are,
on the one hand, the known aliphatic sulfonates contain-
ing from about 10 to about 20 carbon atoms and either
a sulfonic acid group in terminal or in central position or
a statistically distributed sulfonic acid group and wherein
the carbon chain may be interrupted by groups of het-
neratoms such, for example, as —CONH—

Suitable for use in the process of this invention are, for
example, the known petroleum sulfonates, the sulfonates
obtained by sulfochlorination or sulfoxidation of benzenes
or diesel oils, the condensation products of fatty acids
with taurines or hydroxyethane-sulfonic acid, in particular
urethane-sulfonates of the formula

ROC(O)N(R')CH2CH2SO3Me

which are described, for example, in German Patent 1,097,431,
or likewise urethanes having shorter alkyl radicals.
On the other hand, there may also be used alkylarylsulfo-
lates, in particular the alkali metal salts of the known
alkylbenzenes, e.g., n-dodecylphenyl-sulfonate,
tetrapropylene-benzene-sulfonate and sulfonates of alkyl-
benzenes mixtures obtained, for example, by condensation
of monochlorinated C6-C8-hydrocarbon mixtures with
benzene. Moreover, known benzene-sulfonic acids con-
taining alkyl or alkaryl radicals linked by means of
heteroatoms, such as N,N-dibenzylamine-4-sulfonic acid,
or alkynaphthalene-sulfonic acids, such as dibutynaph-
thalene-sulfonic acid, may be used in addition.
A particularly suitable wetting agent (component (d)) is
the combination of the urethane sulfonates described
in German Patent 1,097,431, with alkylsulfonates such,
for example, as the combination of

C2H4·CH2·OC(O)N(C2H5)2·C6H4SO3Na

with C4H8·SO3Na. Instead of the alkali metal salts of
the sulfonates mentioned there may also be used other
water-soluble salts, such as ammonium or triethanol-
amine salts. A combination of oxalkylates and sulfonates
has likewise proved very favorable. It is prepared by
using preferably 2 to 4 parts by weight of a sulfonate per
1 part by weight of an oxalkylate.
As fatty acids (component (c)) there may be used in
the first place carboxylic acids having from about 12 to 18
carbon atoms. As examples of such acids there may be
mentioned the following: lauric acid, oleic acid, palmitic
acid, behenic acid, resin acids and, in particular, stearic
acid, which in the majority of cases are used in the form
of salts, for instance in the form of alkali metal or am-
monium salts. It is also possible to use other salts of fatty
acids or to prepare them in situ, for example, the salts of
alkaline earth metals. Mixtures of fatty acid salts may
likewise be used. The portion of fatty acids or soaps (com-
ponent (c)) in the mixture according to the invention
amounts generally to about 0.1–5% by weight.
As phosphoric acid esters (component (b)) there are
preferred the phosphoric acid esters of alcohols of medium
molecular weight having from about 4 to about 8 carbon
atoms, for example, tri-isobutyl-phosphate, tricetyl-phos-
phate and, in particular, tributyl-phosphate. Surprisingly
enough, a small addition of phosphoric acid ester suffices
to increase the wetting power. It is advantageous to start
from partially saponified esters or to saponify the esters
partially when preparing the combination according to
the invention, i.e., to use them in the form of the salts of
phosphoric acid esters of the formula

(RO)3-P(O)(OH)2-1

Suitable carboxylic acid esters of Formula I

R1-O—C—R2

(component (a)) are those which contain as radicals R1
and R2 saturated or unsaturated alkyl groups containing
4 to 18, preferably 6 to 12 carbon atoms each, of which at
least one, preferably both, contain at least one side-chain
carrying 1 to 4 carbon atoms preferably in 2-position.
As examples of said carboxylic acid esters there may be
mentioned: 2-ethyl-caproic acid ester of isobutyl alcohol,
2-ethyl-butanol, of 2-ethylhexanol or of 2,6-dimethyl-
heptanol-2; dimethyl-isopropyl-acetic acid ester of
2,6,8-trimethyl-nonanol-4; isodecyclic acid ester of 2-methyl-7-
ethyl-undecan-4, and the ester of tridecyl alcohol ob-
tained by oxo-synthesis with 2-methylheptane-carboxylic acid. These esters offer the remarkable advantage that they are stable in caustic alkaline baths because of their poor saponifiability and that they maintain their good foam reducing action. Of particular advantage are the esters of 2-ethylcapronic acid with branched alcohols containing 6 to 8 carbon atoms.

The esters of Formula I can be prepared by known methods which are described, for instance, by Houben-Weyl "Methoden der Organischen Chemie." O. Thieme-Verlag, Stuttgart, 4th edition, vol. 8, p. 508 ff.

The individual components of the mixture are mixed, advantageously in the heat, in the form of thickly liquid, aqueous pastes or solutions having a water content of, for instance, 30 to 80% by weight.

Furthermore, it has proved favorable to add to the mixtures 0.2 to 2% of commercially available inorganic polyphosphates and/or metaphosphates such, for example, as sodium hexametaphosphate. By an addition of this kind the stability of the mixtures in stock solutions (e.g., concentrations of 10 to 20%) as well as to hard water is increased.

In order to improve the consistency and solubility of the pastes there may be added, if necessary, the homogenizers, dispersing agents, solvents and extenders commonly used in the detergents, cleansing agents and textile auxiliaries industries, for example, polyvinyl alcohol, polyglycol ether of medium or high-molecular weight, methyl- or carboxymethyl-cellulose, dimethylaminoethyldiethanol, aliphatic alcohols, urea, formamide, neutral salts such as sodium sulfate and likewise other emulsifiers and wetting agents such, for instance, as Turkey red oils and fatty amine oxethylates, in minor amounts of about 0.1 to 0.5% by weight each.

The following examples illustrate the invention but they are not intended to limit it thereto, the percentages being by weight unless otherwise stated.

**EXAMPLE 1**

In the case of baths, each of which contains a wetting agent mixture in a quantity of 1 g./L. of wash-active substance (WAS), the decomposition of foam is measured according to the foam test method 53 902 of the German Industrial Standards (DIN). The foam is produced with 25 beats in 25 seconds, and the height of the foam is measured in cm., the measures being read immediately after churning and after some minutes. The values obtained are compiled in the following Tables I and II. For determination of the wetting values according to the funnel method, a standardized circular cotton fabric is placed on the solution (containing 1 g. of WAS per liter) and then the period of time is measured until the cotton fabric sinks.

As wetting agent mixtures pour in foam formation there were used according to the invention:

**Mixture A**

| Addition product of 8 mols of ethylene oxide and 1 mol of iso-tridecyl alcohol | 5.4 |
| Urethane of the formula C₆H₄(O)₈(N(C₆H₁₃)₂C₂H₄SO₃Na | 3.6 |
| Sodium salt of hexadecylsulfonic acid (prepared by subchlorination and saponification of a straight chain paraffin oil with an average of 16 carbon atoms | 18.6 |
| Stearic acid | 1.7 |
| Sodium hydroxide solution (of 33% strength) | 0.8 |
| Sodium hexametaphosphate | 0.4 |
| Tri-isobutyl-phosphate | 0.9 |
| 2-ethylcapronic acid ester of an octanol obtained by oxo-synthesis | 8.6 |
| Water | 60 |

Wetting value in water free from salt: 8.6 seconds; wetting value in 0.88% sodium hydroxide solution containing per liter 30 g. of sodium chloride: 17 seconds.

For the purpose of comparison, the mixtures A₁ and B₁ were prepared, which correspond to mixtures A and B but do not contain 2-ethylcapronic acid esters.

**Mixture D**

| Product obtained by addition of 8 mols of ethylene oxide to 1 mol of iso-tridecyl alcohol | 5.3 |
| Urethane C₆H₄(O)₈(N(C₆H₁₃)₂C₂H₄SO₃Na | 6.9 |
| Sodium salt of hexadecylsulfonic acid (as in mixture A) | 1.7 |
| Stearic acid | 0.7 |
| Sodium hydroxide solution (of 33% strength) | 1.8 |
| Sodium hexametaphosphate | 0.4 |
| Sodium salt of an alkylbenzenesulfonate (the alkyl radical of which has a straight chain with 12 carbon atoms) | 12.0 |
| 2-ethylcapronic acid-2-ethylhexyl ester | 7.2 |
| Water | 64.0 |

Wetting value in water free from salt: 3–4 seconds; wetting value in 0.88% sodium hydroxide solution: 5–6 seconds.

**TABLE I**

| Mixtures | Distilled water | In-0.88% NaOH plus 0.88% Na₂SO₄ per liter | Height of foam in cc. | 0.88% NaOH | g. of Na₂SO₄ per liter Imme-
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100 (2)</td>
<td>400</td>
<td>200</td>
<td>450</td>
<td>500</td>
<td>750</td>
</tr>
<tr>
<td>B</td>
<td>100 (2)</td>
<td>400</td>
<td>200</td>
<td>450</td>
<td>500</td>
<td>750</td>
</tr>
<tr>
<td>C</td>
<td>100 (2)</td>
<td>400</td>
<td>200</td>
<td>450</td>
<td>500</td>
<td>750</td>
</tr>
</tbody>
</table>

1 After 30 sec. 10 After 30 sec.
Product obtained by addition of 8 molis of ethylene oxide to 1 mol of isostyreol alcohol 5.3
Urethane C₂H₇OC(O)NC₂H₅+CH₃SO₃Na 0.9
Stearic acid 1.7
Sodium hydroxide solution (of 33% strength) 0.7
Tri-isobutylphosphate 1.8
Sodium hexa-metaphosphate 0.4
Sodium salt of an alkylbenzene-sulfonate (the alkyl radical of which has a straight chain with 12 carbon atoms) 12.0
2-ethylhexyl ester of dimethylisopropyl-acetic acid 7.2
Water 64.0

Wetting value in water free from salt: 4–5 seconds; wetting value in 0.88% sodium hydroxide solution: 5–6 seconds.

Product obtained by addition of 8 molis of ethylene oxide to 1 mol of isostyreol alcohol 5.5
Urethane C₂H₇OC(O)NC₂H₅+CH₃SO₃Na 7.2
Stearic acid 1.9
Sodium hydroxide solution (of 33% strength) 0.8
Tri-isobutylphosphate 1.9
Sodium hexa-metaphosphate 0.4
Sodium salt of hexadecylsulfonic acid (prepared by sulfoxidation of a straight-chain paraffin oil of an average of 16 carbon atoms) 13.4
Isopropanol 4.7
2-ethylcaproic acid ester of octanol obtained by oxo-synthesis 7.5
Water 56.7

Wetting value in water free from salt: 4–5 seconds; wetting value in 0.88% sodium hydroxide solution: 6–7 seconds.

Product obtained by addition of 8 molis of ethylene oxide to 1 mol of isostyreol alcohol 5.5
Urethane C₂H₇OC(O)NC₂H₅+CH₃SO₃Na 7.2
Stearic acid 1.9
Sodium hydroxide solution (of 33% strength) 0.8
Tri-isobutylphosphate 1.9
Sodium hexa-metaphosphate 0.4
Isopropanol 4.7
2-ethylcaproic acid ester of 2,6-dimethylheptanol-4 7.5
Water 56.7

Wetting value in water free from salt: 4–5 seconds; wetting value in 0.88% sodium hydroxide solution: 6–7 seconds.

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Height of foam in cm. in— Distilled water after 10 seconds</th>
<th>0.88% NaOH after 1 minute</th>
<th>After 5 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>D₁</td>
<td>150</td>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>D₂</td>
<td>100</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>E</td>
<td>50</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>F₁</td>
<td>200</td>
<td>200</td>
<td>70</td>
</tr>
<tr>
<td>F₂</td>
<td>300</td>
<td>200</td>
<td>70</td>
</tr>
</tbody>
</table>

For the purpose of comparison the mixtures D₁ and F₁ were prepared which correspond to mixtures D and F but do not contain 2-ethylcaproic acid esters.

Example 2
A tent cloth which is dyed through only with difficulty is padded with a liquor containing 20 g./l. of the dyestuff C.I. No. 71000 (cf. Color Index, vol. 3, 1956, 2nd edition) in a finely divided form which is particularly suitable for padding liquors, as well as 10 g./l. of wetting agent mixture C described in Example 1.

Padding is carried out at a temperature of 20° C. The squeezing effect of the variable roller padding machine amounts to 80%. After padding, drying and completion of the dyeing by vatting, the dyeing obtained is well penetrated by the dyestuff.

The same method of operation was applied while using, for comparison, liquors containing (a) 4.45 g./l. of a commercially available wetting agent containing as active ingredient about 80% of the sodium salt of dibutyl-naphthalene-sulfonic acid (the amount of wetting agent used thus corresponds in active substance to 10 g. of wetting agent mixture C); (b) no wetting agent. When proceeding according to method (a) the merchandise is only insufficiently penetrated by the dyestuff. The dyeing obtained without addition of wetting agents is unsatisfactory and cannot be used.

Example 3
Several samples of the tent cloth mentioned in Example 2 which is dyed through only with difficulty, are padded at 20° C. on a double roller padding machine with a squeezing effect of 60% with padding liquors containing 30 g./l. of a reactive dyestuff of the following structure:

![Chemical structure of reactive dyestuff]

and 3 g./l. of a phthalocyanine reactive dyestuff obtained by reaction of copper phthalocyanine-(3)-tetrasulfonic acid chloride with the acid sulfuric acid ester of β-hydroxyethyl-(4-amine)-phenylsulfone according to the method described in Example 1 of the German patent specification No. 1,179,317 laid open to public inspection; and (a) no wetting agent; (b) 4.45 g./l. of a commercially available wetting agent containing as active ingredient about 80% of the sodium salt of dibutyl-naphthalene-sulfonic acid (the amount used corresponds to 10 g. of the wetting agent mixture C as regards the active substance; (c) 10 g./l. of the wetting agent mixture C described in Example 1.

The merchandise is rolled up and abandoned overnight (for at least 16 hours). It is then rinsed with cold water, acidified with acetic acid, rinsed hot at 80° C., soaped for 10 minutes while boiling with 2 g./l. of an alkylphenylpolyglycol ether and then rinsed with warm and with cold water.

When dyeing without addition of a wetting agent (a) the dyeing obtained is very weak and uneven. The merchandise is not penetrated by the dyestuff. Compared with dyeing (c) dyeing (b) shows a considerably weaker tint and is less penetrated by the dyestuff.

Moreover, an addition of the wetting agent according to the invention eliminates the difficulties which may be caused by the foam formation of the padding liquor. When using instead of mixture C the wetting agent mixture A described in Example 1 there is obtained a dyeing of equal quality.

Example 4
The levelling action of the wetting agent according to the invention is shown by the following tests:

Ground dyeing—6 × 10 g. of a bleached cotton yarn are pre-dyed for 45 minutes at 60° C. with 2% of the bluish green indanthrene dyestuff bis-benzanthrene-peri-thiophene in a goods-to-liquor ratio of 1:20 with addition of 16 ml./l. of sodium hydroxide solution (38° Bé.) and 5 g./l. of sodium dithionite, squeezed, oxidized, rinsed, centrifuged and dried.
Levelling-up test.—10 g. each of the cotton yarn dyed in this manner and 10 g. of a bleached cotton yarn are treated for 45 minutes at 60° C. in one bath at a goods-to-liquor ratio of 1:20, with liquors of the following composition:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.5% sodium hydroxide solution, cc/f.</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sodium dithionite, g/f.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Auxiliary mixture (C) of Example 1, g/f.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Auxiliary agent (I), g/f.</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
<td>0.45</td>
</tr>
</tbody>
</table>

It is evident that with the use of auxiliary mixture (C) a good levelling-up effect is obtained between the ground dyeing and the undyed yarn added, whereas without the addition of auxiliary agents or when adding auxiliary agent (I) only very little of the dyestuff migrates to the white material.

Auxiliary agent (I) is a commercially available wetting agent containing as active substance about 80% of the sodium salt of dibutylphthalic acid-sulfonic acid. The content of active substance corresponds to that of mixture C. Instead of mixture C there may be used with an equally good effect mixture B or mixture E (cf. Example 1).

Example 5

Into a testing device which works according to the principle of the ban dyeing machine there are introduced at 20° C. and 70° C. respectively.

(a): Grey cotton yarn 10 g. —— cc/f. 2000
Distilled water ——— cc/f. 2000
Wetting agent mixture C (cf. Example 1) —— g. 6

(b): Grey cotton yarn 10 g. —— cc/f. 2000
Distilled water and —— cc/f. 2000
Commercially available wetting agent containing as active substance about 80% of the sodium salt of dibutylphthalic acid-sulfonic acid (the amount of active substance corresponding to that of 6 g. of the wetting agent mixture mentioned sub (a) —— g. 2.7

(c): Grey cotton yarn 10 g. —— cc/f. 2000
Distilled water ——— cc/f. 2000

The following wetting values were found:

Test (a) —
Temperature:
20° C. 18 sec.
70° C. 16 sec.

Test (b) —
Temperature:
20° C. 30 sec.
70° C. 45 sec.

Test (c) —
Temperature:
20° C. 30 min. Over
70° C. 5 min.

In test (c) the yarn floats for a long time on the surface of the liquor. Test (a) shows a considerable reduction of the wetting time as compared with test (b). Moreover, the addition of wetting mixture (c) which is poor in foam formation offers the advantage that even at a high speed of circulation and at a high temperature no foam formation can be observed on the liquor.

Instead of mixture C there may be used with equal success 5 g. each of mixture G or F.

We claim:

1. A wetting agent showing a levelling action and reduced formation of foam, containing the following components:

(a) aliphatic, carboxylic acid esters of the formula

\[ R_1-O-C-R_2 \]

wherein \( R_1 \) is an alkyl radical, having 4–18 carbon atoms, \( R_2 \) is an alkyl radical having 4–18 carbon atoms and wherein at least 1 of these alkyl radicals shows at least 1 ramification of 1 to 4 carbon atoms, (b) phosphoric acid esters of aliphatic alcohols having 4 to 8 carbon atoms or said phosphoric acid esters which are partially saponified,

(c) fatty acids or soaps, and

(d) wetting agents selected from the group consisting of addition products of 6–30 mols of alkylene oxide, having 2–3 carbon atoms in the alkylene radical and 1 mol of a high molecular aliphatic alcohol or 1 mol of an alkyl phenol containing at least 1 alkyl radical with 4–9 carbon atoms, alkali metal salts of alkyl sulphonic acid esters having 8–18 carbon atoms in the alkyl radical, alkali metal salts of aliphatic and aliphatic-aromatic sulphonlic acids, and a mixture of these compounds.

2. A wetting agent as defined in claim 1, containing 0.5 to 4 parts by weight of component (a) 0.05 to 2 parts by weight of component (b) and 0.05 to 1 part by weight of component (c) per 10 parts by weight of component (d).

3. A wetting agent as defined in claim 1, containing 4 to 30% of component (a), 0.1 to 20% of component (b), 0.1 to 10% of component (c) and 60–95% of component (d), referred to the weight of the dry mixture.

4. A process for dyeing, printing, and pad dyeing of textile materials which comprises adding to the dye baths, printing pastes or padding liquors a wetting agent having a levelling action and reduced formation of foam as defined in claim 1.

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