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(54) **Title:** COMPOSITIONS WITH IMPROVED UREASE-INHIBITING EFFECT COMPRISING (THIO)PHOSPHORIC ACID TRIAMIDE AND FURTHER COMPOUNDS

(57) **Abstract:** An composition comprising: (A) a mixture comprising at least one (thio)phosphoric acid triamide according to the general formula (I) $R^1R^2N-P(X)(NH_2)_2$ wherein X is oxygen or sulfur; R^1 is a C_1 to C_{20} alkyl, C_3 to C_{20} cycloalkyl, C_6 to C_{20} aryl, or dialkylaminocarbonyl group; R^2 is H, or R^1 and R^2 together with the nitrogen atom linking them define a 5- or 6-membered saturated or unsaturated heterocyclic radical, which optionally comprises 1 or 2 further heteroatoms selected from the group consisting of nitrogen, oxygen, and sulfur, and (C) at least one amine selected from the group consisting of (C1) a polymeric polyamine, and (C2) an amine containing not more than one amino group and at least three alkoxy- or hydroxy-substituted C_2 to C_{12} alkyl groups R^{21} , wherein at least one of the groups R^{21} is different to the other groups R^{21} , and (C3) an amine containing not more than one amino group and at least two alkoxy- or hydroxy-substituted C_2 to C_{12} alkyl groups R^{22} , wherein at least one of the groups R^{22} bears the alkoxy or hydroxy substituent at a secondary or tertiary carbon atom and wherein at least one of the groups R^{22} is different to the other group(s) R^{22} , and (C4) an amine containing at least one saturated or unsaturated C_8 to C_{40} alkyl group R^{23} , and (C5) a saturated or unsaturated heterocyclic amine which contains at least one oxygen atom as ring atom and which does not contain a further alkoxy group.



INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

C05G 3/08(2006.01)i; C05C 9/00(2006.01)i

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C05G; C05C

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)

WPI,EPODOC,CNKI,CNABS,REGISTRY(STN),CAPLUS(STN);phosphoric acid triamide,alcohol,aromatic,benzyl,hydroxyl, amine,amide,fertilizer,urease,inhibiting

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 1204310 A (IMC-AGRICO COMPANY) 06 January 1999 (1999-01-06) description, page 4, lines 10-14 and 23-32, page 6, lines 4-22	18-29, 33-34
Y	CN 1204310 A (IMC-AGRICO COMPANY) 06 January 1999 (1999-01-06) description, page 4, lines 10-14, page 6, lines 4-8 and 16-22	14-15, 30-32
X	CN 101945837 A (FERTIVA GMBH) 12 January 2011 (2011-01-12) description, paragraphs [0010]-[0017], [0021], [0038] and [0042]	1-13, 16-17
Y	CN 101945837 A (FERTIVA GMBH) 12 January 2011 (2011-01-12) description, paragraphs [0010]-[0017], [0021] and [0042]	14-15, 30-32
A	WO 2007/093528 A1 (BASF AKTIENGESELLSCHAFT) 23 August 2007 (2007-08-23) claims 1-10	1-34

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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“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

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“&” document member of the same patent family

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