

Title (en)

PHENYLIMINO-THIADIAZABICYCLOALKANE DERIVATIVES, PROCESSES AND INTERMEDIATES FOR THEIR PREPARATION AND THEIR USE AS HERBICIDES

Title (de)

PHENYLIMINO-THIADIAZABICYCLOALKAN DERIVATE, VERFAHREN UND ZWISCHENPRODUKTE FÜR DEREN HERSTELLUNG UND DEREN VERWENDUNG ALS HERBIZIDE

Title (fr)

DERIVES DE PHENYLIMINO-THIADIAZABICYCLOALCANE, PROCEDES ET INTERMEDIAIRES POUR LEUR PREPARATION ET LEUR UTILISATION COMME HERBICIDES

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Application

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Abstract (en)

[origin: WO9521174A1] Compounds of formula (I): wherein R is C1-C6alkyl, C1-C6haloalkyl, C3-C6alkenyl, C3-C6alkynyl, C1-C4alkoxy or C3-C6cycloalkyl; R1 is halogen; R2 and R3 are each independently of the other C1-C4alkyl; R4 is halogen or a group of the formula -X-R5, -X-A-R6 or (a); R5 is hydrogen, C1-C6alkyl, C1-C8haloalkyl, C1-C4alkoxy-C1-C4alkyl, C1-C10alkylthio-C1-C4alkyl, C1-C4alkylamino-C1-C4alkyl, di-C1-C4alkylamino-C1-C4alkyl, cyano-C1-C8-alkyl, C3-C8alkenyl, C3-C8haloalkenyl, C3-C8alkynyl, C3-C6cycloalkyl, oxetanyl, C3-C7-halocycloalkyl, C3-C7cycloalkyl-C1-C4alkyl, phenyl-C1-C3alkyl that is unsubstituted or substituted in the phenyl ring by 1, 2 or 3 identical or different substituents selected from halogen, C1-C4alkyl, C1-C4haloalkyl, C1-C4alkoxy and C1-C4haloalkoxy, or R5 is an alkali metal, alkaline earth metal or ammonium ion, or is the group -N=C(CH₃)₂, -CH₂-O-N=C(CH₃)₂ or -CH₂CH₂-O-N=C(CH₃)₂; X is oxygen or sulfur; A is C1-C4 alkylene; R6 is a 5- or 6-membered heterocyclic ring that contains from 1 to 3 hetero atoms selected from the group oxygen, nitrogen and sulfur and that is bonded via the carbon or nitrogen atom to the alkylene chain A, it being possible for the heterocyclic ring in turn also to be benzene-fused and mono- or di-substituted by halogen, C1-C4alkyl, C1-C3haloalkyl, C1-C3alkoxy, C1-C3haloalkoxy, di-C1-C3alkylamino, hydroxy or by an oxy function; R7 is hydrogen, C1-C6alkyl, C1-C4haloalkyl, C1-C4alkoxy, C1-C4alkoxy-C1-C4alkyl, C3-C6alkenyl, C3-C6alkynyl, C3-C8cycloalkyl, hydroxy-C1-C4alkyl or cyano-C1-C4alkyl; R8 is hydrogen, C1-C6alkyl, C1-C4haloalkyl, C1-C4alkoxy-C1-C4-alkyl, hydroxy-C1-C4-alkyl, C3-C6alkenyl, phenyl or phenyl-C1-C3alkyl, the phenyl ring being unsubstituted or mono-, di- or tri-substituted by halogen, C1-C4alkyl, C1-C4haloalkyl, C1-C4alkoxy or by C1-C4haloalkoxy; or R7 and R8, together with the nitrogen atom to which they are bonded, form a pyrrolidino, piperidino, morpholino, thiomorpholino or piperazino ring that is unsubstituted or mono- or di-substituted by C1-C3alkyl; Z is oxygen or sulfur; n is 3, 4 or 5; and n1 is 0, 1, 2 or 3, and salts of those compounds, are suitable as herbicides for controlling weeds in crops of useful plants.

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