

Title (en)
ARYLPHENYL-SUBSTITUTED CYCLIC KETO ENOLS

Title (de)
ARYLPHENYLSUBSTITUIERTE CYCLISCHE KETOENOLE

Title (fr)
CETO-ENOLS CYCLIQUES A SUBSTITUTION ARYLPHENYLE

Publication
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Application
EP 99915759 A 19990414

Priority
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• EP 9902488 W 19990414

Abstract (en)
[origin: DE19818732A1] Cycloalkyl- and (hetero)aryl-phenyl substituted cyclic ketoenols (I) and their intermediates (II) are new. Cycloalkyl- and (hetero)aryl-phenyl substituted cyclic ketoenols of formula (I) are new: X = halo; alkyl, alkoxy or alkenyloxy optionally substituted with halo; alkylthio; alkylsulfinyl; alkylsulfonyl; NO₂; CN; or optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy; or phenylalkylthio; Y = optionally substituted cycloalkyl, aryl or heteroaryl; W = H; halo; alkyl, alkoxy or alkenyloxy optionally substituted with halo; NO₂; or CN; Z' = halo; alkyl, alkoxy or alkenyloxy optionally substituted with halo; NO₂; or CN; CKE = group of formula (1)-(6); Q = N-D; O or S; A = H; alkyl, alkenyl, (poly)alkoxyalkyl or alkylthioalkyl optionally substituted with halo; saturated or unsaturated cycloalkyl optionally substituted and optionally containing 1 or more hetero ring atoms; or aryl, aralkyl or heteroaryl optionally substituted with halo, alkyl, haloalkyl, alkoxy, haloalkoxy, CN or NO₂; B = H; alkyl or alkoxyalkyl; or A + B + C atom = form a saturated or unsaturated cyclic group optionally substituted and optionally containing 1 or more hetero ring atoms; D = H; optionally substituted alkyl, alkenyl, alkynyl, alkoxyalkyl, (poly)alkoxyalkyl, alkylthioalkyl, saturated or unsaturated cycloalkyl optionally containing 1 or more hetero ring atoms, aralkyl, aryl, heteroarylalkyl or heteroaryl; or A + D + N atom = form a saturated or unsaturated cyclic group optionally substituted and optionally containing 1 or more hetero atoms or further hetero atom(s) when CKE is formula (2); or A + Q<1> = form alkanediyl or alkenediyl optionally substituted with optionally substituted alkyl, OH, alkoxy, alkylthio, cycloalkyl, benzyloxy or aryl; or Q<1> = H or alkyl; Q<2>, Q<4>, Q<5> and Q<6> = H or alkyl; Q<3> = H; alkyl; alkoxyalkyl; alkylthioalkyl; cycloalkyl optionally substituted and optionally containing S or O in place of 1 CH₂; or optionally substituted phenyl; or Q<3> + Q<4> + C atom = form a saturated or unsaturated cyclic group optionally substituted and optionally containing a hetero atom; or G = H or a group of formula (b)-(g): E = metal or ammonium ion; L and M = O or S; R<1> = alkyl, alkenyl, (poly)alkoxyalkyl or alkylthioalkyl optionally substituted with halo; cycloalkyl optionally substituted with halo, alkyl or alkoxy and optionally containing 1 or more ring hetero atoms; or optionally substituted phenyl, phenylalkyl, heteroaryl, phenoxyalkyl or heteroaryloxyalkyl; R<2> = alkyl, alkenyl or (poly)alkoxyalkyl optionally substituted with halo; or optionally substituted cycloalkyl, phenyl or benzyl; R<3>, R<4> and R<5> = alkyl, alkoxy, mono- or di-alkylamino, alkylthio, alkenylthio or cycloalkylthio optionally substituted with halo; or optionally substituted phenyl, benzyl, phenoxy or phenylthio; R<6> and R<7> = H; alkyl, cycloalkyl, alkenyl, alkoxy or alkoxyalkyl optionally substituted with halo; or optionally substituted phenyl or benzyl; or NR<6>R<7> = forms a cyclic group optionally interrupted with O or S. Independent claims are also included for: (a) the preparation of compounds (I); and (b) intermediates of formula (II): R = -CH₂-C(O)-N(D)-C(A)(B)(CO₂R<8>); -CH₂-CO-Hal; or -CH₂-C(O)-N(D)-C(A)(B)(CO₂H); -CH₂-C(O)-N(D)-C(A)(B)(CN); -CH₂-CO-O-C(A)(B)(CO₂R<8>); -CH₂CO₂H; or -CH₂CO₂R<8>; B(OH)₂ and Y = -CH₂-CO₂H; CH(CO₂R<8>)(CO-C(A)(B)(S-CH₂-Ar)); -C(=C=O)(COHal); -CH(CO₂H)₂; or -CH(CO₂R<8>)₂; -CH₂-CO-C(Q<1>)(Q<2>)-C(A)(B)(CO₂R<8>); -CH₂-CO-C(Q<1>)(Q<2>)-C(A)(B)(CO₂H); -CH₂-CO-C(Q<5>)(Q<6>)-C(Q<3>)(Q<4>)-C(A)(B)(CO₂R<8>); -CH₂-CO-C(Q<5>)(Q<6>)-C(Q<3>)(Q<4>)-C(A)(B)(CO₂H); -CH(CO₂R<8>)-CO-C(Q<5>)(Q<6>)-C(Q<3>)(Q<4>)-C(A)(B)(CO₂R<8>); R<8> and R<8>' = alkyl; Hal = Cl or Br; Ar = phenyl optionally substituted with W.

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