

Title (en)
THIO(METH)ACRYLATES, MIXTURES FOR PRODUCING TRANSPARENT PLASTICS, TRANSPARENT PLASTICS AND METHOD FOR THEIR PRODUCTION AND USE

Title (de)
THIO(METH)ACRYLATE, MISCHUNGEN ZUR HERSTELLUNG TRANSPARENTER KUNSTSTOFFE, TRANSPARENTE KUNSTSTOFFE SOWIE VERFAHREN ZU DEREN HERSTELLUNG UND VERWENDUNG

Title (fr)
THIO(METH)ACRYLATE, MELANGES DESTINES A LA PRODUCTION DE MATIERES PLASTIQUES TRANSPARENTES, MATIERES PLASTIQUES TRANSPARENTES ET LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION

Publication
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Application
EP 05814642 A 20051203

Priority
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• DE 102005003303 A 20050124

Abstract (en)
[origin: DE102005003303A1] Thio(meth)acrylate, obtained by reacting methyl thioacrylic acid compound(s) (I) and/or (II) with thiol compounds, is new. Thio(meth)acrylate, obtained by reacting methyl thioacrylic acid compound(s) of formula(e) $\text{CH}_2=\text{C}(\text{R}_1)-\text{C}(=\text{O})-\text{S}-\text{R}_2-\text{S}-\text{C}(=\text{O})-\text{C}(\text{R}_1)=\text{CH}_2$ (I) and/or $\text{CH}_2=\text{C}(\text{R}_1)-\text{C}(=\text{O})-[\text{S}-\text{R}_2-\text{S}-\text{CH}_2-\text{CH}(\text{R}_1)-\text{C}(=\text{O})]$ m-S-R 2>-S-[C(=O)-CH(R 1>)-CH 2-S-R 2>-S] n-C(=O)-C(R 1>)=CH 2(II) with thiol compounds containing at least two thiol groups, is new. R 1>H or CH 3; R 2>(cyclo)aliphatic residue or optionally substituted (hetero)aromatic residue; m, n : whole number greater than 0 (where m+n is greater than 0). Independent claims are included for: (1) a thio(meth)acrylate comprising compounds of formulae A-Y 1>-A, A-Y 1>-Z-B 1>, A-(Y 1>-Z) q-Y 1>-A, B 1>-(Z-Y 1>) r-Z-B 1>and/or A-(Y 1>-Z) s-B 1>; (2) a mixture, for preparing transparent plastics, comprising at least one compound of the thio(meth)acrylate, at least one radically polymerizable monomer with at least two methacrylate group and at least one aromatic vinyl compound; (3) a method for preparing the transparent plastics comprising polymerizing the thio(meth)acrylate; (4) transparent plastics obtained by the method; and (5) an optical, preferably ophthalmic lenses, comprising the transparent plastics. A : terminal group of formula -CH 2-CH(R 1>)-C(=O)-S-R 2>-S-C(=O)-C(R 1>)=CH 2and/or -CH 2-CH(R 1>)-C(=O)-[S-R 2>-S-CH 2-CH(R 1>)-C(=O)] m-S-R 2>-S-[C(=O)-CH(R 1>)-CH 2-S-R 2>-S] n-C(=O)-CH(R 1>)=CH 2; B 1>-S-R 3>-SH; R 3>R 2>; Z : binding group of formula -CH 2-CH(R 1>)-C(=O)-S-R 2>-S-C(=O)-CH(R 1>)-CH 2- and/or -CH 2-CH(R 1>)-C(=O)-[S-R 2>-S-CH 2-CH(R 1>)-C(=O)] m-S-R 2>-S-[C(=O)-CH(R 1>)-CH 2-S-R 2>-S] n-C(=O)-CH(R 1>)-CH 2-; Y 1>binding group of formula -S-R 3>-S-; and q, r, s : 1-100.

IPC 8 full level
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