

Title (en)  
LOW VISCOSITY FUNCTIONAL FLUID COMPOSITION

Title (de)  
NIEDRIGVISKOSE FUNKTIONELLE FLÜSSIGKEITZUSAMMENSETZUNG

Title (fr)  
COMPOSITION DE FLUIDE FONCTIONNEL À FAIBLE VISCOSITÉ

Publication  
**EP 4305131 A1 20240117 (EN)**

Application  
**EP 22701202 A 20220114**

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Abstract (en)  
[origin: EP4056669A1] This invention relates to a functional fluid, comprising (A) from 8 to 80% by weight, based on the total composition, of one or more ortho-ester according to formula (I) wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> are independently selected from H or C<sub>1</sub> to C<sub>8</sub> alkyl groups, preferably methyl or butyl, R<sub>4</sub> means H or C<sub>1</sub> to C<sub>8</sub> alkyl, preferably H or methyl, a, b, c are independently numbers from 0 to 6, preferably 3 or 4, with the proviso that a+b+c is at least 1, (B) from 10 to 87% by weight, based on the total composition, of one or more alkoxy glycol according to formula (II)  
$$\text{R}_5 - \text{O} - (\text{CH}_2 - \text{CH}_2 - \text{O})_m - \text{H}$$
  
(II) wherein R<sub>5</sub> is a C<sub>1</sub> to C<sub>8</sub> alkyl residue, m is a number from 2 to 6, (C) from 0 to 20 wt.-% of at least one compound according to formula (III)  
$$\text{H} - \text{O} - (\text{CH}_2 - \text{CH}_2 - \text{O})_k - \text{H}$$
  
(III) wherein k is a number of 2 or higher, with the proviso that in at least 80 wt.-% of all compounds according to formula (III) k is 2 or 3, (D) at least one additive, selected from the group consisting of corrosion inhibitor, alkalinity agents, aging protection agents, defoamers and lubricants, the fluid comprising at most 3 wt.-% of an ester between boric acid and a glycol or polyglycol compound, and with the proviso that the combined amount of component (A) and component (B) adds up to at least 70 % of the total fluid weight.

IPC 8 full level  
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