

Title (en)  
BUILDER FOR DETERGENTS

Title (de)  
GERÜSTSTOFF FÜR WASCHMITTEL

Title (fr)  
ADJUVANTS POUR AGENTS DE LAVAGE

Publication  
**EP 0656050 B1 19970514 (DE)**

Application  
**EP 93919063 A 19930816**

Priority  
• DE 4228043 A 19920824  
• EP 9302172 W 19930816

Abstract (en)  
[origin: WO9404649A1] Washing and cleaning agents, especially for textiles, which contain combinations of builders like zeolite and/or crystalline laminated silicates of the general formula (I)  $\text{NaMSixO}_{2x+1} \cdot y\text{H}_2\text{O}$ , in which M is sodium or hydrogen, x is a number from 1.9 to 4 and y is a number from 0 to 20, and, as complex formers, polyhydroxy monocarboxylic acids or polyhydroxy monocarboxylic acid salts with 4 to 6 carbon atoms, possibly a keto group and at least 3 hydroxy groups per molecule, or mixtures of these acids and/or salts, in which the ratio by weight of builders to polyhydroxy monocarboxylic acid or polyhydroxy monocarboxylic salt or mixtures of these acids and/or salts is 30:1 to 1:1, exhibit better secondary washing capacity than similar agents which, instead of polyhydroxy monocarboxylic acids or polyhydroxy monocarboxylic acid salts, contain polyhydroxy tricarboxylic acids or polyhydroxy tricarboxylic acid salts like citric acid or citrate. Preferred agents contain up to 15 wt % sodium and/or potassium carbonate but no phosphonates, (co)polymeric polycarboxylates and citric acid or citrate.

IPC 1-7  
**C11D 3/12**

IPC 8 full level  
**C11D 3/12** (2006.01); **C11D 3/20** (2006.01); **C11D 11/02** (2006.01); **C11D 17/06** (2006.01)

CPC (source: EP)  
**C11D 3/1273** (2013.01); **C11D 3/128** (2013.01); **C11D 3/2086** (2013.01); **C11D 11/02** (2013.01)

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