

Title (en)  
OVERBASED ADDITIVES

Publication  
**EP 0235929 B1 19911016 (EN)**

Application  
**EP 87300761 A 19870128**

Priority  
GB 8601990 A 19860128

Abstract (en)  
[origin: EP0235929A1] A process for making an oil solution of a highly basic sodium sulphonate which comprises (a) heating sodium hydroxide with an alkoxyalkanol and a solvent to remove as an azeotrope with alkoxyalkanol and said solvent a controlled amount of water formed in the reaction of part of the sodium hydroxide with the alkoxyalkanol; (b) adding to the mixture an organic sulphonic acid so as to react with a part of the sodium hydroxide and form the sodium salt of the sulphonic acid and water; (c) thereafter introducing carbon dioxide into the reaction mixture so as to react with the basic sodium compounds therein; (d) removing solvent by distillation; and (e) adding base oil to the process during one of steps (b), (c) or (d) so that the desired product is obtained, in which the amount of alkoxide produced in step (a) is controlled by the azetropic removal of water in that step such that the amount of water produced in step (b) and (c) is not greater than the amount stoichiometrically required to hydrolyse the alkoxide.

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**C07C 303/00; C10L 1/24; C10M 159/24**

IPC 8 full level  
**C10L 1/24** (2006.01); **C10L 10/08** (2006.01); **C10M 159/24** (2006.01); **C10M 163/00** (2006.01); **C10N 10/02** (2006.01); **C10N 10/04** (2006.01); **C10N 30/04** (2006.01); **C10N 30/10** (2006.01); **C10N 40/00** (2006.01); **C10N 40/25** (2006.01)

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Cited by  
US5449470A; US4839094A; EP2025737A1; WO9218587A1; EP2420553A1; EP2017329A1

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