

ABSTRACT

Phenate Detergent Preparation

A sulphurised calcium phenate detergent prepared by the following stages:

i) reacting one or more alkyl phenol materials comprising hydrogenated distilled cashew nut shell liquid with first defined amounts of a calcium salt and of a promoter, and with sulphur, in the presence of a process solvent; and

(ii) reacting the product of stage (i) with second defined amounts of the calcium salt and of the promoter and carbonating the product;

the total amount of calcium salt and of promoter being such as to provide a sulphurised phenate of desired TBN, and the first amount of each of the calcium salt and of the promoter in stage (i), relative to its total amount in the method, being less than 50, expressed as a molar percentage.

The sulphurised calcium phenate has a kinematic viscosity at 100°C of greater than 750 and less than 1200 cSt.

No Figure