

Case 8417(2)

ABSTRACT  
DETERGENT COMPOSITIONS

A detergent concentrate composition suitable for incorporation into a finished lubricating oil comprises:-

(A) an additive concentrate comprising:-

- (a) a lubricating oil, and
- (b) a lubricating oil soluble sulphurised or non-sulphurised alkaline earth metal hydrocarbyl phenate modified by reaction to incorporate from greater than 2 to less than 40% by weight based on the weight of the concentrate (A) of either (i) at least one carboxylic acid having the formula:-



wherein R is a C<sub>10</sub> to C<sub>24</sub> alkyl or alkenyl group and R<sup>1</sup> is either hydrogen, a C<sub>1</sub> to C<sub>4</sub> alkyl group or a -CH<sub>2</sub>-COOH group, or an anhydride or ester thereof, or (ii) a di- or polycarboxylic acid containing from 36 to 100 carbon atoms or an anhydride or ester thereof,

the concentrate having a BN greater than 300 and a viscosity at 100°C of less than 1000cSt, and

(B) an additive concentrate comprising:-

- (a) a lubricating oil, and
- (b) a lubricating oil soluble sulphurised or non-sulphurised alkaline earth metal hydrocarbyl phenate, that has not been modified or has been modified by reaction to incorporate less than 0.1% by weight based on the weight of the concentrate (B) of either (i) or (ii), the concentrate preferably having a BN of less than 300.

