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(54) Title: PROCESS FOR PRODUCING AN OVERBASED METAL DETERGENT

(57) Abstract: A high TBN overbased metal sulfonate detergent is prepared by reacting a hydrocarbyl-substituted organic sulfonic acid or metal salt thereof with a basic alkali metal or alkaline earth metal compound in the presence of a mono-alcohol and a carboxylic acid and reacting this mixture with carbon dioxide to form a carbonated overbased metal sulfonate. The resulting overbased metal detergent has a metal equivalent to sulfonic acid substrate ratio of 5:1 to 27:1. The product thus prepared has improved viscometrics, filterability, and TBN:ash ratio. Lubricating compositions comprising said overbased detergent display reduced friction and wear performance. The invention further relates to methods of lubricating an internal combustion engine with a lubricant containing an overbased detergent prepared as described.

