

ABSTRACT

MINERAL OIL-FREE LUBRICANT AND METHOD FOR PRODUCING A MINERAL OIL-FREE LUBRICANT

The invention relates to a method for producing a lubricant, in which, first, an overbased calcium sulfonate is created or provided, this is then transformed from the vaterite to the calcite form and, finally, a calcium sulfonate grease is produced by heating the mixture. The invention further relates to a lubricant produced by this method and to a lubricant that comprises at least one ester composition, calcium carbonate and at least one overbased alkylbenzene sulfonate. According to the invention, the basicity of the mixture is limited to a TBN of at most 550 mg KOH/g during the synthesis of the overbased calcium sulfonate and to a TBN of at most 450 mg KOH/g during the transformation of the calcium sulfonate. The method according to the invention is characterized more particularly in that both the calcium sulfonate and grease containing same are produced only on an ester basis, and therefore the end product contains no mineral oil at all and is thus easily and completely biologically degradable.

Figure 3