

Title (en)

METHOD FOR DECONTAMINATING WASTE SEMI-SYNTHETIC OR SYNTHETIC MINERAL OILS

Title (de)

VERFAHREN ZUR DEKONTAMINIERUNG VON MINERAL-, HALBSYNTHETISCHEN-, UND SYNTHETISCHEN ÖLEN

Title (fr)

PROCEDE DE DECONTAMINATION DES HUILES MINERALES SEMI-SYNTHETIQUES ET SYNTHETIQUES USAGEES

Publication

**EP 1190023 A1 20020327 (FR)**

Application

**EP 00951623 A 20000621**

Priority

- FR 0001705 W 20000621
- FR 9908021 A 19990623

Abstract (en)

[origin: FR2795421A1] The stages of treatment of the contaminated oil enables operation of the fractional distillation stage at a lower temperature and avoids the cracking of any polymers present. The decontamination of waste lubricating oils comprising mineral oils, semi-synthetic and synthetic oils comprises: (a) the addition of 1-2 wt.% glycol to the oil in a container, heating to 60 deg C, stirring then cooling and separating to obtain an aqueous phase containing glycol and phenolic products, suspended material, silicone oil residues and anti-foam agents; (b) withdrawal of the aqueous phase and addition of a chelating agent to the oily phase in stoichiometric amount, or above, relative to the compounds to eliminate, in a soda solution at pH not exceeding 7 (preferably 6) at 60-80 deg C, with stirring for 1 hour, and centrifugation to separate off the oily phase from the solution containing chelated heavy metals; (c) the stoichiometric addition of a coagulant to the oily phase to separate iron, and separation of the aqueous phase obtained; (d) the stoichiometric addition of barium hydroxide to the oily phase in suspension or solution to precipitate sulfate and phosphate ions as barium phosphate and sulfate and separation by centrifugation; and (e) fractional distillation to recover the base constituents of the oils, and optionally decoloration of the products obtained.

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**C10M 175/00**

IPC 8 full level

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CPC (source: EP)

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