

Title (en)
EMULSION-TYPE EXPLOSIVES OF THE WATER-IN-OIL TYPE

Title (de)
EMULSIONSARTIGE SPRENGSTOFFE VOM WASSER-IN-ÖL-TYP

Title (fr)
EXPLOSIFS DE TYPE ÉMULSION DU TYPE EAU DANS L'HUILE

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Application
EP 21161190 A 20210308

Priority
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Abstract (en)
The present disclosure relates to a water-in-oil emulsion explosive composition, comprising an organic phase and an oxidizer phase at least comprising ammonium nitrate, wherein at least 50 wt.%, or even 100 wt.% of the normally used non-renewable oil in the organic phase is replaced with one or more chemically processed renewable oils and/or straight vegetable oils or straight animal fats. The present disclosure relates to an explosive emulsion composition of the water-in-oil type is disclosed, comprising- between 5 wt.% and 20 wt.% of an organic phase in view of the total weight of the emulsion composition, the organic phase comprising• between 12 wt.% and 50 wt.% of one or more emulsifiers,• between 50 wt.% and 88 wt.% of a fuel composition,in view of the total weight of the organic phase composition,in which the fuel composition consists of• between 5 wt.% and 100 wt.% one or more chemically processed renewable oils,• between 0 wt.% and 95 wt.% of one or more straight vegetable oils (SVO) or one or more straight animal fats, and• between 0 wt.% and 50 wt.% one or more non-renewable oils,in view of the total weight of the fuel composition, the total weight% of the different oils being 100, and- between 80 wt.% and 95 wt.% of an oxidizer phase in view of the total weight of the emulsion composition, comprising• at least 40 wt. and up to 80 wt.% of ammonium nitrate (AN), and• at least 5 wt.% of one or more secondary nitrate salts,in view of the total weight of the oxidizer phase composition.

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Citation (search report)
• [XI] DE 10208317 A1 20020905 - DYNAENERGETICS GMBH & CO KG [DE]
• [XI] US 10065898 B1 20180904 - LUNA KARL MASLO [PE]
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• [A] WO 2010071946 A1 20100701 - ORICA EXPLOSIVES TECH PTY LTD [AU], et al
• [A] WO 0123326 A1 20010405 - BULK MINING EXPLOSIVES PTY LTD [ZA], et al
• [A] US 2004055678 A1 20040325 - HALES RICHARD H [US], et al

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