

Title (en)

Stable ammonium nitrate-emulsion explosives and emulsion for use therein.

Title (de)

Stabile Ammoniumnitratemulsionssprengstoffe und Verwendung einer solchen Emulsion.

Title (fr)

Explosifs stables du type à émulsion comportant un nitrate d'ammonium et émulsion utilisée pour leur fabrication.

Publication

EP 0131355 A2 19850116 (EN)

Application

EP 84303208 A 19840511

Priority

- US 49391683 A 19830512
- US 57660284 A 19840203

Abstract (en)

Explosives that are sensitized blends of a water-in-oil emulsion and AN particles, such as AN or ANFO prills, have improved stability when their structure hinders the loss of water from the aqueous emulsion phase and transportation of such water across the oil phase to the AN particles. Use of an anionic emulsifying agent comprising a fatty acid salt, e.g., as formed in situ during the formation of the emulsion, is the preferred way of forming such a blend-stabilizing structure. Emulsion/ANFO and emulsion/AN blends stabilized in this manner make satisfactory storage-stable packaged products. Emulsion/AN blends made with a new low-viscosity emulsion containing essentially all of the oil required to oxygen-balance the blend and a proportionately larger amount of anionic emulsifying agent to stabilize the emulsion structure constitute preferred bulk products owing to their greater adaptability to pumping. Pumping the stabilized blends through an annular stream of aqueous lubricating liquid is advantageous.

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IPC 8 full level

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CPC (source: EP KR)

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Cited by

EP0221701A1; FR2624112A1; CN105272783A; ES2123468A1; EP0331430A1; GB2216513A; CN1049417C; WO9112485A1; US6537399B2; WO9900342A1

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