Pressure Pumping



Reservoir Stimulation Fluids

Anti-Sludge Agents

WAS-402LA Antisludge Agent

WAS-402LA is an acid-soluble, anionic antisludge agent that prevents the formation of asphaltenic and paraffinic sludge and emulsions when treating with strong mineral-acid systems. WAS-402LA is effective in a wide variety of crude oils. It can be easily blended into the acid package, and it remains stable for extended periods.

Applications

- Excellent broad-range use in acidizing stimulation fluids
- Effective in oil-well stimulation fluids to prevent sludging tendency
- Crude oils with high sludging tendency
- For use with hydrochloric acid concentrations up to 28%
- Effective up to at least 300°F (150°C)

Usage

- The normal concentration range is from 5 to 25 gal/1,000 gal (5 to 25 L/m³), depending on the sludging properties of the crude oil and the acid concentration.
- WAS-402LA is anionic; therefore, it should not be premixed with acid blends containing cationic corrosion inhibitors.
- An on-site bottle test is typically required to select the most cost-efficient product usage.

Safety Notices

- Consult the MSDS, safety posters, and/or product label before use, and use personal protective equipment as advised.
- Observe standard precautions when handling this and all other organic chemicals.

Advantages

- Provides compatibility with a wide range of acid-package
- additives, including cationic corrosion inhibitors
- Effectively retards the formation of paraffin and asphaltenic sludges
- Offers solubility and stability in strong mineral acids, e.g., hydrochloric acid
- Enhances flowback and enables rapid return of treating fluid by preventing sludges and emulsions that restrict permeability

Typical Physical Properties

Appearance	Light amber liquid
Specific gravity	0.92 to 1.02
Flash point (°F, °C)	166 74
Packaging	55-gal (208-L) drum 330-gal (1,249-L) tote

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