

ZX-P4-13

Finished Pour Point Depressant

General

Finished pour point depressants ZX-P4-13 for crude oil are a type of chemical additive used to lower the freezing point of crude oil and improve its fluidity, and they belong to crude oil flow modifiers. It solves the problem of wax deposition blockage in the pipeline transportation of high-wax crude oil by changing the morphology of wax crystals and preventing the formation of a three-dimensional network structure. This agent can replace the traditional heating process and features simple operation, environmental protection and energy conservation, which can enhance the safety of pipeline operation

Composition

Polymer mixture in high boiling solvents.

Product

Appearance @ 40°C:	Yellowish viscous liquid
Viscosity	Approx. 180 mm ² /s (DIN 51562) @ 40°C
Density	Approx. 0.88 g/cm ³ (ISO 12185)@ 40°C
Pour Point	Approx. 27 °C (ISO 3016)
Flash Point	Approx. 42°C (EN 22719/B)

Application

Solubility

Finished pour point depressants ZX-P4-13 for crude oil is soluble in mineral oils, aliphatic-/aromatic hydrocarbons. It is insoluble in both water and lower alcohols.

Field of application

Finished pour point depressants ZX-P4-13 for crude oil is an additive to reduce the Pour Point of Crude Oils, Heavy Fuel Oils and Residues significantly. By using Finished pour point depressants ZX-P4-13 for crude oil local transport and storage specifications as for example pipeline specifications can be fulfilled.

Treat rates vary with the kind of crude oil and are usually in the range of 300 to 1200 ppm to reduce the Pour Point by 7 to 15 °C.

For Heavy Fuel Oils the treat rates vary in the range of 500 – 1500 ppm, depending on the composition and characteristics of the Heavy Fuel Oil.

Finished pour point depressants ZX-P4-13 for crude oil can be injected undiluted when heated up to 50-60°C before use. At oil temperatures below 60 °C a dilution with aromatic hydrocarbons in ratios of 1:1 to 1:4 is advised in order to ensure a good mixing. For optimal performance the application temperature should not be below the WAT of the crude/oil.

Safety and handling

Finished pour point depressants ZX-P4-13 for crude oil is intended for technical use only. Pay strictly attention to the safety instructions of the MSDS. Use gloves and goggles for protection. Material spilled on the skin should be washed off with plenty of water and with soap immediately. If splashed in the eye, rinse with copious quantities of water and consult a physician. Open drums / containers carefully to release any built up pressure. Keep containers closed when not in use and avoid water penetration. Keep away from heat, sparks and open flames. Empty drums and container may hold gases that form explosive mixtures with air.

The product appears solid below the pour point and might become pasty or jelly-like above the pour point. In this case heating up to 40-50°C is required to liquify the product again.

Storage

When stored in the original closed drums and protected from environmental effects Finished pour point depressants ZX-P4-13 for crude oil can be stored for the shelf life of two years.

Material Compatibility

The compatibility with metals, plastics and elastomers were deduced from typical behavior against the containing solvent:

- Metals: suitable are a wide range of steels, brass, aluminum and copper
- Plastics: suitable are HDPE and PP
- Elastomers: suitable are PTFE (Teflon) and Viton ETP /FKM

Packing

200L steel drum or 1000L IBC or per clients' requests