

ZX-P4-05

Asphaltene Dispersant

General

Crude oil pour point depressants also called Asphaltene Dispersant ZX-P4-05 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.

Asphaltene Dispersant ZX-P4-05 is a concentrate of a special polymer in high boiling hydrocarbons.

Composition

Special Polymer in high boiling hydrocarbons.

Product

Appearance @20°C:	Pale brown waxy solid
Viscosity (DIN 53015 at 40°C)	Approx. 12.000 mPa.s
Viscosity (DIN 53015 at 80°C)	Approx. 210 mPa.s
Density (DIN EN ISO 15212-1 at 20°C)	Approx. 0.87-0.91 g/cm ³
Pour Point (ISO 3016)	Approx. +36 °C
Flash Point (ASTM D 93)	Approx. +50°C
Solubility at 30°C	Soluble in aromatic solvents, like toluene, xylene Insoluble in both lower alcohol and water

Application

Field of application

Asphaltene Dispersant ZX-P4-05 concentrate is an additive to improve both the cold flow properties of crude - and residual oils and the stabilization of asphaltenes (pre-heating exchanger anti-foulant). Generally 25-500 ppm Asphaltene Dispersant ZX-P4-05 concentrate are sufficient to reduce PP, viscosity and to mitigate asphaltene precipitation.

Asphaltene Dispersant ZX-P4-05 concentrate can be injected undiluted when heated up to 50-60 °C before use. At oil temperatures below 50°C, however, a dilution with an aromatic hydrocarbon in ratio of 1:1 to 1:4 is advised in order to ensure a good mixing.

Safety and handling

Asphaltene Dispersant ZX-P4-05 concentrate is intended for technical use only. Avoid physical contact. Use gloves and goggles for protection. During transportation in road tankers the product is heated up to temperatures up to 50°C and may cause burns if spilled on the skin. Material spilled on the skin should be washed off with soap and plenty of water. 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 flame. Empty containers may hold gases that form explosive mixtures with air.

Storage

Asphaltene Dispersant ZX-P4-05 is available in steel drums (200L) or ISO-tanker packaging.

When stored in the original closed packaging and protected from environmental effects Asphaltene Dispersant ZX-P4-05 can be stored for the shelf life of two years.

Material Compatibility

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

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

Packaging:

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