Pour Point Depressant/Dispersant

General Statement

A pour point depressant (PPD) is an additive that lowers the pour point of oils and fuels, preventing them from solidifying or becoming too viscous at low temperatures, ensuring smooth flow and operation.

Chemical Identification

- **Products Name**

  MAXDIP-2245, MAXDIP-2270, MAXDIP-1622, MAXDIP-5050AB, MAXDIP-2278, MAXDIP-SM-1622, MAXDIP-SM-1822

- **Chemical Identity**

  The pour point depressants commercially employed are Polymer of ester in aromatic solvent, functional group, Styrene-maleic anhydride copolymers, or their esters, or Polyacrylate, Polyalkylmethacrylate.

Uses and Applications

PPD is an additive which, when added to waxy crude oils, acts as wax crystal modifier, prevents the growth of interlocking wax crystals and enables the oils to be pumpable below its normal pour point.

Physical / chemical properties

Property	Value
Appearance above 35 ºC	Clear to slightly hazy viscous Liquid.
Solubility	Soluble in crude oil & common aromatic solvents, insoluble in water.
Viscosity (cps) at 40 ºC	< 500cps.
Flash Point	28 °C (82 °F) (Tag Open Cup)

Health Effects

Due to presence of aromatic solvents, this product may cause skin and eye irritation. None of the other health effects were observed by any route of exposure.

Environmental Effects

Polymers / Copolymer do not bioaccumulate in the water but due to low biodegradation rate it is expected to remain in soil & sediment. Ecotoxicity is not expected to be acutely toxic.

Exposure

- **Human Health**

  The product is only used for industrial purposes; therefore, consumer exposure is not relevant and does not need to be assessed for this product. Aromatic solvents pose several human health hazards, including potential carcinogenicity, reproductive impairments, and immune dysfunctions, with some solvents causing neurological and respiratory problems. For worker, follow appropriate Risk Management Measures to control risk of exposure.

- **Environment**

  According to GHS/CLP regulations the Aromatic solvents pose significant environmental hazards due to their toxicity, persistence, and potential to cause water and soil contamination, as well as contribute to air pollution and smog formation.

Risk Management Recommendations

Direct contact with the substance can be practically excluded as the product is handled in close process. All personnel should be adequately trained for general handling of chemicals. Wear appropriate PPEs. Ensure adequate ventilation & observe the usual precautions for handling chemicals. Storage must be in MS metallic vessels. Keep away from heat, Flame, and oxidizing agents. Store in a cool enclosed place. Wash hands & skin following contact. If the product gets into your eyes, rinse eyes thoroughly for 15 minutes with tap water and seek medical attention, consult the doctor immediately.

Accidental Release Measures

- **Spill Containment**
  Avoid spills and prevent material from entering water bodies.

- **Clean-up Procedure**
  Use protective equipment during clean-up. Dispose of in accordance with local regulation.

Regulatory Information/Classification and Labelling

- **Regulatory Compliance**
  Product is compliant with OSHA (US); TSCA and other domestic regulations. Being polymer, this product is exempted from REACH (EU) registration.

Classification and Labelling

GHS/CLP Classification	Flammable Category 3, skin irritation category 2
Hazard Pictogram	 GHS02 GHS07
Signal Word	Warning
Hazard Statement	Flammable liquid and vapor. Causes skin irritation.
Precautionary Statements	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Wear protective gloves / eye protection / face protection. Ground/bond container and receiving equipment. Keep container tightly closed. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Conclusion

PPD is a petroleum industrial use that requires safe handling due to its flammable nature. Workers handling this product must use protective gear, and facilities must implement safety protocols to avoid accidents and appropriate Risk Management Measures should be selected and applied to control risk of exposure. Exposure to environment is considered negligible as PPD has supported petroleum industrial uses and the manufacturing process is an enclosed system. Also, this product has no supported uses in direct consumer products.

Contact Information Within Company

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