

LX 250 Pour Point Depressant

Flow Improver for Automotive Lubricants

Description

PPD LX 250 is a pour point depressant to provide the most cost-effective solution to keep your automotive lubricants flowing in the cold. It provides the versatility you need to effectively treat the wide range of new generation base stocks available in the market today and thus permits product rationalization. It is highly recommended for use in a wide variety of engine oils, gear oils, hydraulic and transmission fluids.

Typical physical properties

Appearance	Organic Viscous Liquid
Colour	Pale Yellow to Amber
Specific gravity @ 25 °C	0.86 - 0.90
Flash point	> 120° C
Viscosity @ 100 °C	>100 cst

Typical dosages in finish lubricants

Depending on the degree of depression desired, the typical dosages would range as follows:

Engine oils	0.1 - 0.5 % w/w
Gear oils	0.2 - 1.5 % w/w

Performance characteristics

- **Pour point depression**

PPD LX 250 has been evaluated (as per ASTM-D97) on various international sources of light and heavy base stocks. The average effect of increasing treat rates is tabulated in the table given below:

PPD LX 150 Dose (%)	Pour point of base stocks, °C			
	Core 100 Group I	Core 600 Group I	Chevron 100R Group II	Flint Hill-230 HC Group II
0.00	-21	-06	-12	-15
0.10	-21	-12	-27	-30
0.25	-27	-18	-30	-30
0.50	-30	-21	-33	-33
1.00	-30	-24	-36	-36

Fluidity improvement

LX 250 is also used as a fluidity improver in lubricants which must meet stringent low temperature viscosity requirements under low shear rate conditions such as engine oils, hydraulic and transmission fluids and gear oils.

Base stock solubility and compability

Table below summarizes the effect of PPD LX 150 on the key rheological characteristics of a lubricant:

Viscosity index	Negligible
Pour point	Strong positive
MRV TP-1 viscosity	Strong positive
Brookfield viscosity	Strong positive
Kinematic viscosity (@ -20 °C and 30 °C)	Strong positive
CCS viscosity	Negligible
Shear stability	Negligible