

Supplier - SMART OIL

SmartLub LB6250

Castor Oil Fatty Acid Ester Compound

Lubricity / Anti-wear Booster

Typical Properties

Appearance	Amber Liquid
Specific Gravity@25°C	0.900 - 1.000
pH Value (5% Water Dilution)	9.5-11.0

Product Description

SMARTLUB LB6250 is a multifunctional, environmentally friendly lubricant additive that integrates rust prevention, friction modification, boundary lubrication, and extreme pressure (EP) performance. It is particularly suitable for a wide range of water-based formulation systems.

SMARTLUB LB6250 features a unique molecular structure, containing hydroxyl groups (-OH, located at the C-12 position) and unsaturated double bonds. These provide excellent polarity, strong adsorption onto metal surfaces, and superior film-forming capability. It forms a low-shear-strength lubricating film on metal surfaces, thereby significantly reducing the coefficient of friction.

SMARTLUB LB6250 exhibits good thermal and oxidative stability, making it suitable for medium- to high-temperature processing environments, with low tendency toward carbonization or degradation.

SMARTLUB LB6250 can be used in combination with synthetic esters, borate esters, phosphate esters, and other additives to generate strong synergistic effects, further enhancing anti-wear and extreme pressure performance. It can also partially or fully replace traditional sulphur or chlorine-containing EP additives, thereby significantly reducing environmental impact.

SMARTLUB LB6250 has a wide range of applications and can be used as the boosters for viscosity index improvers and pour point depressants to enhance the overall viscosity-temperature performance of base oils.

SMARTLUB LB6250 is suitable for applications including rust preventive oils, high-temperature chain lubricants, oven chain lubricants, high-temperature hydraulic oils, emulsions, semi-synthetic cutting fluids, and microemulsion systems.

Applications

General Application

Suggested Treat Rates, %wt

3 - 8

Print date: 03-07-26

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