

Supplier - SMART OIL
Smart HMPE 9460
High Mwt.Polyester Ester
High Molecular Wt Polymeric Ester

Typical Properties

Appearance	Clear Yellow to Amber Liquid
Specific Gravity@25°C	0.900 - 1.000
Viscosity@40°C, cSt	40 - 60
Acid Value, mgKOH/g	< 8
Flash Point C.O.C., °C	> 200
Viscosity Index	> 140
Mineral Oil Content	Nil
5%ADDITIVE+95%SN150 P _B /P _D ,kg+	44 / 100
5%ADDITIVE+5%SMART BASE 2517+90%SN150 P _B /P _D ,kg+	76 / 315

*4 Ball Wear Test; Server Motor Speeds reach 1500rpm (P_B) and 1760rpm (P_D) in 0.03sec.

Product Description

SMART HMPE 9460 is a clear yellow to amber, high molecular weight polymeric ester that contains no sulfur, chlorine and phosphorous. Due to its unique molecular structure and high affinity characteristics, it can adhere tightly to the metal surfaces even at elevated temperatures, which performs outstanding anti-frictional and anti-wear properties of lubricants. It can be used in several operations like oil-based formulations, soluble oils and semi-synthetic systems.

SMART HMPE 9460 has a high degree of saturation that can prevent contamination at contact points of tools and metal surfaces from oxidation.

SMART HMPE 9460 has high temperature stability and hydrolytic stability, which can extend coolant life even at tough processing.

SMART HMPE 9460 can replace sulfur, chlorine and phosphorous containing additives with similar performance. Moreover, it can avoid the reduction of product shininess due to the otherwise chemical reaction of the extreme additive with the metals during machining.

SMART HMPE 9460 possesses high viscosity index and good shear stability; which can maintain the corresponding functions of lubrication anti-wear and extreme pressure at elevated temperatures at contact points during machining.

SMART HMPE 9460 is an ash-less additive and has no residue during high temperature operations. It exhibits no corrosion to non-ferrous metals and is suitable for cutting, drawing, and stamping operations on aluminum alloys.

Applications

Threading / Tapping / Cold Head (Cut Side Only)
 Drawing
 Automatic Screw Machines / Stamping

Suggested Treat Rates, %wt

3 - 15
 5 - 15
 2 - 5

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