

Supplier - SMART OIL
SmartPhos P7850
Cetyl-Oleyl Alkyl Phosphate Ester
Phosphate Containing Additives

Typical Properties

Appearance	Light Yellow To Amber Liquid
Specific Gravity@25°C	0.900 - 1.200
Viscosity@40°C, cSt	3000-4000
Phosphorus Content, %wt	> 8
Acid Value, mgKOH/g	< 240
P _B /P _D , kg+	94 / 315

*4 Ball Wear Test; 5% additive in SN150, Server Motor Speeds reach 1500rpm (P_B) and 1760rpm (P_D) in 0.03sec.

Product Description

SMARTPHOS P7850 is a superior light color, low odor phosphate ester; which can be used for formulated into both water-based or oil-based cutting fluids.

SMARTPHOS P7850 is a multifunctional additive that possesses anti-wear, anti-corrosion, wetting, emulsifying, detergency and dispersant characteristics. It is suitable for use in rolling oils, water-based cutting fluids, glass cutting and polishing lubricants.

SMARTPHOS P7850 can be blended with sulfur containing compound to achieve synergistic effect and cover different temperature ranges for lubricating, anti-wear and extreme pressure performance during processing.

SMARTPHOS P7850 performs well in severe operations on difficult-to-machine metals. It can effectively reduce smog and improve surface finishing of the workpieces.

SMARTPHOS P7850 can be used in oil-based formulations such as hydraulic, cutting and grinding oils to boost lubricity and anti-wear performance. In addition, it can function as anti-wear agent in water-based formulations to machine magnesium and aluminium materials.

SMARTPHOS P7850 is a biodegradable product that has limited harmful effect to environment.

Applications	Suggested Treat Rates, %wt
Oil-Based Formulations	2 - 5
Water-Based Formulations	1 - 2

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