

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

### 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 <sub>B</sub> /P <sub>D</sub> , kg+	94 / 315
Std Packaging (NW / GW, Kg)	217.0 / 200.0

### 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

Oil-Based Formulations  
 Water-Based Formulations

#### Suggested Treat Rates, %wt

2 - 5  
 1 - 2

Print date: 03-05-24

**Disclaimer:** Information provided by this website and product page including specifications, applications and formulations are based on tests and data supplied by Smart Oil companies, manufacturers or any of our collaborated companies or suppliers, which are believed to be correct and reliable at the time of writing and data update. However, Smart Oil companies, manufacturers or any of our collaborated companies or suppliers make no warranty or responsibility, express or implied, of any kind regarding products, performance, formulations or applications, as operation conditions and application environments are beyond our control, or products will be modified by action of manufacturers or due to change in market environments. Users are herewith expressly requested to conduct test to determine the suitability of our products or product information before use. Furthermore, we regret that we cannot be responsible for informing customers any changes in specifications, formulations, or other technical contents on this website and product page. Also, We hereby state that all product trademarks other than Smart Oil, including trademarks from our , suppliers are the trademarks belong to the respective companies, or from their sources.