UNPCHEMICALS

EXTREME PRESSURE ANTI-WEAR AGENTS

PSAIL® SERIES

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PSAIL® 2280 is a multifunctional, ashless additive with amine-neutralized phosphoric acid ester structure, which exhibits excellent load carrying capacity, anti-wear and corrosion inhibiting properties. As a multifunctional additive, it can reduce the use of demulsifying agent and anti-rust agent, and exhibits excellent tribological properties, especially at higher temperature it can generate thick boundary lubrication film. In addition, it can also be used to formulate metal working fluids in combination with sulfur carriers because of its good anti-wear performance.

CHEMICAL COMPOSITION

Amine-neutralized mixed phosphate esters CAS No.: 68603-55-4

TYPICAL PROPERTIES

Test Item	Typical Data	Method
Appearance	Yellow clear liquid	Visual inspection
Density at 20℃, g/cm^3	0.96	GB/T 1884
Viscosity at 40℃, mm^2/s	700.0	GB/T 265
Flash point open cup, ℃	121.0	GB/T 3536
Nitrogen content, %	2.4	NB/SH/T 0656
Phosphorus content, %	7.8	SH/T 0296

Note: The above analytical data are not specifications.

PERFORMANCE CHARACTERISTICS

- A multifunctional, ashless additive which exhibits excellent load carrying capacity, anti-wear and corrosion inhibiting properties
- Highly suited for the formulation of lubricants, if high load carrying capacity (FZG) and corrosion inhibition is needed
- Excellent effect if used as corrosion inhibitor in greases
- Good oil solubility

APPLICATION

- Various industrial lubricating oils
- Engine oil
- Metal working fluids
- Lubricating grease

USAGE METHOD

- Added to the formulation directly and compatibility needs to be tested before adding
- Recommended treat level: 0.05-3.00wt%

RELATIVE PRODUCTS

- DEOPHOS 228

PACKAGING AND STORAGE

Packaging	50kg plastic drum or 180kg steel drum (Net weight)
Storage conditions	Store in originally sealed package in a cool, dry, well-ventilated warehouse

HANDLING INFORMATION

Avoid contact with skin, eyes and clothing. Operate in accordance with good industrial health and safety practices. Please refer to material safety data sheet (MSDS) for additional handling information on *PSAIL®2280*.

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