

EXTREME PRESSURE ANTI-WEAR AGENTS

PSAIL® SERIES

Luoyang United Pacific Petrochemical Co., Ltd.

UNPChemicals (LPUPC)

No. 113, Huayang Avenue, Baihe Town,

Mengjin District, Luoyang City

Henan Province, China

+86-379-67877555 sales@unpchemicals.com

www.unpchemicals.com

PSAIL® 2110 is tthiophosphate ester structure, it is a liquid ashless extreme pressure and antiwear agent, which can provide good solubility and hydrolysis stability, and excellent extreme pressure and anti-wear performance. It is designed for metalworking fluids, compressor oils, rolling fluids, hydraulic fluids, and gear oils, etc. It offers good thermal stability and oxidation resistance, serving markets like automotive, consumer goods, and industrial applications such as appliances, fluids, and lubricants.

CHEMICAL COMPOSITION

Amine-neutralized hexyl phosphate CAS No.: 126019-82-7

TYPICAL PROPERTIES

Test Item	Typical Data	Method
Appearance	Colorless to light yellow liquid	-
Density at 20℃, g/cm³	1.0	GB/T 1884-2000
Acid value, mgKOH/g	<1	GB/T 264-1983
Flash point closed cup, ℃	>100	ASTM D93
Sulfur content, %	4.4	GB/T 11140-2008
Phosphorus content, %	4.3	NB/SH/T 0824-2010

Note: The above analytical data are not specifications.

PERFORMANCE CHARACTERISTICS

- Easy to handle liquid
- Offers excellent solubility in mineral oils, PAOs and esters
- Provide better hydrolytic stability than primary ZnDTPs
- Not corrosive towards copper and ferrous metals

APPLICATION

- Metalworking fluids
- Engine oils
- Air compressor oils
- Hydraulic oils
- Grease

USAGE METHOD

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

■ Metalworking fluids: 2.0-20.0%

Engine oil: 0.5-2.0%

RELATIVE PRODUCTS

IRGALUBE 211

PACKAGING AND STORAGE

Packaging	40kgs or 200kgs / Steel drum (Net weight)	
Storage conditions	Store 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**2110.

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