

PSAIL® 3018 is a multifunctional dialkyl phosphite additive with an oleyl alcohol-based structure that combines antioxidant, antiwear, and stabilizing properties. The distinctive oleyl chain in its molecular structure provides excellent oil solubility and processing characteristics, while the phosphorus content delivers effective extreme pressure and antiwear protection. This phenol-free additive meets environmental compliance standards and finds wide application in lubricating oils, metalworking fluids, and polymer materials (including polyolefins, PVC, and unsaturated polyesters).

CHEMICAL COMPOSITION

Dioleyl hydrogen phosphite

CAS No.: 64051-29-2

TYPICAL PROPERTIES

| Test Item | Typical Data | Method |
|---------------------------------------|---------------------------------|-------------------|
| Appearance | Light-yellow transparent liquid | Visual inspection |
| Density at 20°C, g/cm ³ | 0.91 | GB/T 1884-2000 |
| Viscosity at 40°C, mm ² /s | 22.88 | GB/T 265-1988 |
| Flash point open cup, °C | > 150 | GB/T 3536-2008 |
| Acid number, mgKOH/g | 2.7 | GB/T 264-1983 |
| Phosphorus content, % | 5.3 | SH/T 0296-1992 |

Note: The above analytical data are not specifications.

PERFORMANCE CHARACTERISTICS

- Environmentally friendly, free of phenolic compounds
- High efficiency ashless anti-wear agent, high-temperature and heavy-load extreme pressure agent
- Excellent extreme pressure and lubrication performance

APPLICATION

- Industrial oil and metalworking oil
- Grease

USAGE METHOD

- Added to the formulation directly and compatibility needs to be tested before adding
- Recommended treat level: 1.0-10.0 %

RELATIVE PRODUCTS

- DOVERPHOS 253, JP-218-OR

PACKAGING AND STORAGE

| | |
|---------------------------|--|
| Packaging | 50kg plastic drum or 180kg steel drum (Net weight) |
| Storage conditions | Store in a cool, dry and 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®3018**.

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