



DAPHNE FIRGIST ES

Synthetic ester-based flame-retardant and biodegradable hydraulic oil with excellent heat resistance

1. Application

Daphne firgist ES is used as hydraulic oil for equipment that poses a high risk of fire (ex. High Temperature Heating Furnace, hot rolling equipment, forging press apparatus, and welding machine, etc.).

2. Quality

Daphne firgist ES is a flame-resistant and biodegradable hydraulic oil in which high-quality synthetic esters are blended with suitable additives such as oxidation inhibitor.

3. Characteristics

- (1) High flash point reduces the risk of fire.
- (2) Excellent wear resistance contributes to prolonging the life of the pump.
- (3) High viscosity index and low pour point allow to use in a wide temperature range.
- (4) High oxidation stability and hydrolysis resistance suppress formation of sludge.
- (5) Used oil can be disposed in the same manner as mineral oil-based hydraulic oil.

4. Attention

- (1) General seals having oil-resistant property can be used, but do not use butyl rubber.
- (2) Because some coating materials (phthalic acid, phenolic resin, etc.) cannot be used please contact coating material manufacturer to confirm compatibility with oil.

5. Typical Standard

TEST		Firgist ES
Density	@15°C g/cm ³	0.927
Color	ASTM	L2. 5
Flush point	COC °C	314
Kinetic viscosity mm ² /s	@ 40°C	66. 1
	@ 100°C	11. 3
Viscosity index		165
Pour point	°C	-42. 5
Acid number	mgKOH/g	0. 5
Foaming	@24°C	10-0
Copper Corrosion	100°C × 3h	1 (1B)
Rust prevention test (method A)	@ 60°C × 24h	passed

- Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provide in the Safety Data Sheet (SDS) are followed.
- 「SDS is available upon request through your sales contract office, or via the internet.
<https://www.idss.co.jp/business/lube/>
- Due to continual product research and development, the information contained herein is subject to change without notification.

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