

HEAT TRANSFER OIL VG 460

Description

This is a heat transfer oil based on a specifically refined mineral oil with exceptional oxidation stability and very high resistance to thermal decomposition. It can also be used as a circulation oil VG 460 or thermal oil VG 460.

REDEFINING LIQUID ENGINEERING

Performance Benefits

Excellent thermal oxidation stability	Excellent protection against wear, foam and corrosion
Excellent protection against forming of bore polishing	Low temperature properties to ensure smooth cold start
Good TBN Value	

TESTING METHODS	RESULTS
SAE GRADE	460
VISCOSITY, ASTM D445	
cSt @ 40 °C	421.0
cSt @ 100 °C	42.0
Viscosity Index, ASTM D 2270	153
Autoignition temperature, °C	360
Pour Point, °C, ASTM D 97	-18
Flash Point, °C, ASTM D 92	220
Density @ 15°C kg/l, ASTM D 4052	0.88
Thermal Stability (340c ,1000hr) ASTM D51528 Substance %	5.7
Distillation Range (Initial Distillation Point C)	315
2% Distillation Point C	340.9

Micro-Conradson Carbon Residue %wt ISO 10370	<0.01
Sulfur %ASTM D 5453	<0.01
Maximum Bulk temperature C	345
Maximum Film Temperature C	375
Normal Boiling Point C	359
Pumpability, 300 mm ² /s (cSt)	11
Pumpability, 2000 mm ² /s (cSt)	-3
Minimum liquid temperatures for fully developed turbulent flow (NRe > 10000)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	72
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	53
Minimum vapor temperatures for fully developed turbulent flow (NRe > 2000)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	35
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	26
Total acidity ASTM D664	<0.2 mg KOH/g
Moisture content, maximum ASTM E203	150 ppm
Dielectric constant @ 23°C ASTM D924	2.60

Approval

PRODUCTS AVAILABLE IN 5L, 18L, 200L

Health, Safety & Environment

Health and Safety

- Our Lubricant is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.
- Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.
- Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.advancelubholdings.com>
- Protect the Environment Take used oil to an authorized collection point.
- Do not discharge into drains, soil or water. Additional Information Advice on applications not covered here may be obtained from our representative.

