

Marine Refrigerator Oil

L-DR 22S, 46S, 68S, 100S

Product Description

Kunlun Marine Refrigerator Oil series is produced by using a selected unique additive blended with superior polyol ester. Kunlun synthetic series refrigerator oil has the advantages of good lubricating ability, low-temperature fluidity, outstanding miscibility, thermal stability and resistance to hydrolysis.

Applications

Kunlun Marine Refrigerator Oil series is suitable for lubricating refrigeration compressors and system components using HFC-134a, the ozone-friendly, chlorine-free refrigerant (such as R407c, R410A) which is replacing R-12 in most refrigeration applications around the world today.

Features

- Outstanding low temperature performance: It prevents coagulation of product under low temperature environment. It offers excellent performance requirements for compressors that switches between the high and low temperature requirements.
- Chemical stability: Good mixability with no reaction with refrigerant. It offers excellent anti-oxidation stability which prolongs and extends the service life.
- Excellent lubrication: Kunlun synthetic series refrigerator oil with the selected unique additive, offers excellent anti-oxidant and anti-wear performance to reduce compressor wear and smoother compressor operation which lowers maintenance costs.
- Good performance in lustration: This series of lubricant is transparent which can effectively prevent attrition of the impurity granule in the axle-tree surface and thus keep working parts clean.
- Good resistance to hydrolysis: This feature ensures that the refrigeration oil will not hydrolyse with water to improve the heat transfer.
- Excellent thermo-stability: Will not produce deposit in the charging valve spot.
- High dielectric strength: Guarantees a good insulating ability. In the sealed unit, the oil/refrigerant mixture forms part of insulation to the system.
- Suitable viscosity: It forms a high oil film strength under the high operating temperature and is also able to maintain fluidity under extremely low temperature conditions.

Specifications

Properties		L-DR 22S	L-DR 46S	L-DR 68S	L-DR 100S	Test Methods
Kinematic Viscosity (40°C)	mm ² /s	22.35	46.70	68.60	101.2	ASTM D445
Density at 15°C	kg/m ³	996.0	995.0	953.8	955.4	ASTM D4052
Density at 20°C	kg/m ³	993.0	992.0	951.0	952.0	ASTM D4052
Pour point	°C	-45	-35	-30	-25	ASTM D97
Flash point(COC)	°C	240	246	258	260	ASTM D92
Moisture	ppm	35	35	35	35	ASTM D1744
Neutralization,	mgKOH/g	0.01	0.01	0.01	0.01	ASTM D974
Low Temperature Miscibility, 10% Oil	°C					JIS K2211
R134a		-35	-35	-35	-30	
R407c		-30	-30	-30	-15	
R410A		-25	-25	-25	-10	
Chemically Stable With Refrigerant, (R134a,175°C,14D)	color, No.	3	4	5	5.5	ASHRAE 97

* Above product typical properties are indicative and subject to change without prior notice

Storage and Handling

- All vessels, oil tanks, pipelines, and valves which are used in transportation of the Kunlun synthetic series refrigerator oil should be cleaned thoroughly, and inspected for cleanliness before they are used.
- It must be stored in dedicated storage tanks/equipment and is recommended to be stored in an indoor and controlled environment such as waterproof, moisture proof, and dustproof.
- Product must be labelled clearly and properly during the entire transportation process to prevent mixing of other petrol-chemical product into the KunLun Marine Refrigeration Oil.
- Avoid contact with skin directly. Upon skin contact with the oil, one should cleanup with the soap and water promptly.
- This product is not allowed to be mixed with any other refrigerator oils.