LUNARIA SH 46 - 68

Compressor

Full-synthetic PAO based oil for ammonia (R 717) refrigerating compressors.

APPLICATIONS

Refrigerating compressors using ammonia as a refrigerant

- Lubrication of refrigerating compressors (reciprocating and screw) using ammonia as a refrigerant.
- PAO (polyalphaolefin) base oils to improve oil drain interval and ensure good performances even at very low temperature.
- Field of application : evaporator temperature down to -50°C.

SPECIFICATIONS

International Specification

- Conform with the following specifications : ISO 6743-3 DRA et DIN 51503 KA
- NSF-H1 registered
  certificate number: 139826: LUNARIA SH 46
  139827: LUNARIA SH 68

OEM

- Suitable for the refrigerating compressors of the constructors below :
  APV, BOCK, J&E HALL, GRAM, GRASSO, HOWDEN, SABROE, ...

ADVANTAGES

Cleanliness and high performances of the compressor:
Efficiency of the heat exchangers:
Operation cost cutting:

- High resistance to oxidation in the presence of ammonia. Synthetic base oils and additivation system specillay selected to avoid the formation of black sludges (reaction between oil and ammonia).
- Low pour point, eliminating the risk of any residual lubricant freezing in the evaporator, thereby providing excellent heat exchange.
- Very high flash point given the low volatility of LUNARIA SH oils: oil consumption is reduced by 30 to 50 % compared with conventional oils.

Storage:

- Warning: storage must be done in order to avoid the presence of water within the oil. Indeed, water could block the evaporator.

TYPICAL CHARACTERISTICS	METHODS	UNITS	LUNARIA SH	
			46	68
Density at 15 °C	ISO 3675	kg/m^3	830	835
Viscosity at 40°C	ISO 3104	mm^2/s	46	68
Viscosity at 100°C	ISO 3104	mm^2/s	7.8	10.7
Pour Point	ISO 3016	°C	- 60	- 57
Flash point OC	ISO 2592	°C	268	278
Foaming test sequence 1 (tendancy / stability)	ASTM D 892	mL / mL	0/0	0/0
Severe oxidation test (72 h at 150 °C – NH3/air)	IP 280 modified			
- Increase in viscosity		%	+ 0.7	+ 1.1
- Insolubles in heptane, filter 0.8µm		mg	10.0	7.0
Dynamic viscosity at -12 °C	NFT 60-152	mPa.s	940	1200
NOACK volatility (1 hour, 250°C)	ASTM D 5800	%	3.0	2.5
Compatibility with elastomers	NF ISO 6072			
- chloroprene, volume variation		%	- 1.8	- 2.0
- NBR, volume variation		%	- 5.0	- 5.5

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS
INDUSTRIE
21-08-2020 (supersedes 07-02-2019)
LUNARIA SH 46-68
1/1

This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.
A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from www.quick-fds .com.