# **LUNARIA NH 46 - 68**



## Compressor



Additive enhanced hydrocracked mineral 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.
- Hydrocracked technology of base oils to improve oil drain interval.
- Field of application : evaporator temperature down to -30°C.

## **SPECIFICATIONS**

OEM approvals/ references

• 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. 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 NH oils: oil consumption is reduced by 30 to 50 % compared with conventional oils.
- Good compatibility with common elastomers (chloroprene, NBR....).
  - Warning: storage must be done in order to avoid the presence of water within the oil.
    Indeed, water could block the evaporator.

#### Storage:

TYPICAL CHARACTERISTICS	METHODS	UNITS	LUNARIA NH	
			46	68
Density at 15 °C	ISO 3675	kg/m³	850	860
Viscosity at 40°C	ISO 3104	mm²/s	46	68
Viscosity at 100°C	ISO 3104	mm²/s	7.3	9.2
Pour Point	ISO 3016	°C	- 36	- 36
Flash point OC	ISO 2592	°C	246	256
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		%	+ 1.3	+ 3.8
- Insolubles in heptane, filter 0.8µm		mg	18.6	19.6
Dynamic viscosity at -12 °C	NFT 60-152	mPa.s	1095	2100
NOACK volatility (1 hour, 250°C)	ASTM D 5800	%	7	4.5
Compatibility with elastomers	NF ISO 6072			
- chloroprene, volume variation		%	5.5	2.0
- NBR, volume variation		%	-4.5	-4.5

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS INDUSTRIE

01-02-2019 (supersedes 28-06-2007) LUNARIA NH 46-68

