

TECHNICAL DATA SHEET

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MOL-FREEZ ULTRA 68

Ammonia Refrigeration Compressor Lubricant

Product Description:

MOL FREEZ ULTRA 68 is a high-performance, semi-synthetic refrigeration lubricant specifically formulated for ammonia refrigeration compressors operating with R-717 gas. This advanced lubricant is designed to provide exceptional stability, efficiency, and protection under demanding conditions. Its unique blend of premium base oils and specialized additives ensures superior oxidation resistance, excellent corrosion protection, effective pour point depression, and defoaming properties.

With its cutting-edge formulation, MOL FREEZ ULTRA 68 offers outstanding low-temperature performance and remarkable oxidation stability, making it the ideal choice for modern ammonia refrigeration systems.

Key Features and Benefits:

1. Exceptionally Low Carry-Over:

o Minimizes oil carry-over, which enhances evaporator efficiency and reduces the risk of oil contamination within the system. This results in optimal cooling performance and less downtime.

2. High System Efficiency:

• The advanced formulation reduces oil deposits and extends the service life of filters, ensuring the refrigeration plant operates with maximum efficiency and minimal energy loss.

3. Low Evaporation Loss:

The semi-synthetic nature of MOL FREEZ ULTRA 68 minimizes evaporation losses, leading to lower oil consumption compared to conventional mineral oils. This helps reduce operational costs over time.

4. Outstanding Oxidation Stability:

 Exceptional resistance to oxidation ensures the oil maintains its performance over long periods, even in hightemperature environments, thereby extending oil change intervals and reducing maintenance costs.

5. Excellent Compatibility with Seals:

o Designed to be fully compatible with commonly used seals in ammonia refrigeration systems, ensuring leakfree operation and enhanced system reliability.

6. Corrosion Protection:

Contains special additives that protect critical system components from corrosion, ensuring long-term protection and reducing the risk of costly repairs or component failures.

7. Versatility in Applications:

- o Specifically engineered for use in ammonia refrigerating plants with R-717 gas, it is suitable for both rotary screw and reciprocating compressors.
- Can also be used as a coolant for process gas compressors, making it a versatile solution for a wide range of industrial refrigeration applications.

8. Extended Oil Change Intervals:

 The superior thermal and chemical stability allows for longer oil change intervals, reducing maintenance costs and increasing system uptime.

Applications:

- Ammonia Refrigeration Compressors (R-717)
- Industrial Refrigeration Systems
- Cold Storage Facilities
- Food Processing and Preservation Plants
- Pharmaceutical and Chemical Processing Facilities
- Process Gas Compressors (Rotary Screw and Reciprocating

Summary:

MOL FREEZ ULTRA 68 is a technologically advanced semi-synthetic refrigeration lubricant designed to meet the rigorous demands of ammonia refrigeration systems. With its exceptional low carry-over, oxidation stability, and corrosion protection, it ensures high system efficiency, reduced maintenance, and extended oil life.

This lubricant offers a reliable and cost-effective solution for industries requiring superior performance and long-lasting protection for their refrigeration systems.

Storage and Packing Conditions:

- Should be stored sealed under normal storage conditions. Shelf life in original package and at room temperature is 5 years.
- Available in 16 KG Pails, 175 KG Drums.

Human Health and Work Safety:

- Normal safety precautions (gloves and safety goggles) Should be employed
- Avoid eye and prolonged skin contact and wash thoroughly after handling material.
- Don't discharge used oil in drains, dispose to an authorized used oil collection point
- For more information, please see the Material Safety Data Sheet (MSDS).

Physical and Chemical Conditions:

MOL-FREEZ ULTRA 68	Method	Value
Appearance	Visual	Clear & Bright
Viscosity @ -30°C (cSt)	ASTM D445	24.625
Viscosity @ -20°C (cSt)	ASTM D445	5.599
Viscosity @ 40°C (cSt)	ASTM D445	68
Viscosity @ 100°C (cSt)	ASTM D445	6.8
Viscosity Index	ASTM D 2270	112
Pour Point (^O C)	ASTM D 97	-42
Flash Point (^O C)	ASTM D 92	250
Density @ 15 °C g/cm3	ASTM D 1298	0.87
Aniline Point ^O C	ASTM D 611	135
Neutralization Value, mg KOH/g	ASTM D 974	< 0.05