



Ammonia Compressor Oil

Phillips 66® Ammonia Compressor Oil is an inhibited paraffinic circulating oil specifically developed for use in reciprocating and rotary screw compressors in industrial refrigeration systems using ammonia or carbon dioxide.

Ammonia Compressor Oil is specially formulated to resist degradation when exposed to nitrogen compounds and acids formed when compressed ammonia comes into contact with the oil and condensed water. It has excellent oxidation resistance and thermal stability at high temperatures to minimize sludge and varnish formation, and provide long service life. It has a low pour point for use in ammonia refrigeration systems used for sub-zero cooling. It has excellent water-separating properties to minimize the formation of emulsions, protects system components against rust and corrosion, and is resistant to excessive foam buildup that can interfere with proper lubrication.

Ammonia Compressor Oil meets the performance requirements of major manufacturers of ammonia refrigeration compressors. It is **not** recommended for use with CFC, HCFC or HFC refrigerants such as Freon®-12, Freon®-22 or R-134a.

Applications

- Refrigeration compressors using ammonia or carbon dioxide as the refrigerant
- Cold storage facilities
- Ice making machines
- Circulating systems in chemical plants and mills where contamination with moisture or aqueous gas is a problem

Features/Benefits

- Excellent resistance to chemical degradation
- Excellent oxidation resistance and thermal stability
- Provides longer service life than conventional naphthenic ammonia refrigeration oils
- Excellent water-separating properties
- Low pour point
- Protects against rust and corrosion
- Good foam resistance

Inhibited Paraffinic Circulating Oil for Ammonia Refrigeration Compressors

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



Ammonia Compressor Oil

Typical Properties			
ISO Grade	32	46	68
Specific Gravity @ 60°F	0.864	0.867	0.871
Density, lbs/gal @ 60°F	7.20	7.22	7.25
Color, ASTM D1500	0.5	0.5	0.5
Flash Point (COC), °C (°F)	220 (428)	225 (437)	228 (442)
Pour Point, °C (°F)	-33 (-27)	-33 (-27)	-33 (-27)
Viscosity			
cSt @ 40°C	32.0	46.0	68.0
cSt @ 100°C	5.6	6.8	8.8
SUS @ 100°F	165	237	352
SUS @ 210°F	45.0	49.0	55.9
Viscosity Index	114	102	102
Copper Corrosion, ASTM D130	1a	1a	1a
Foam Test, ASTM D892, Seq. I, mL	0/0	0/0	0/0
Oxidation Stability, RPVOT, ASTM D2272, minutes	133	133	133
Rust Test, ASTM D665 A&B	Pass	Pass	Pass

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.

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Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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