FRICK® PureOil™

Optimize the Performance of Your FRICK Equipment







FRICK® has manufactured refrigeration compressors for all types of applications and refrigerants since 1882. Continuous research backed by decades of experience has resulted in FRICK oils that meet or exceed the demands of all refrigeration and gas compression applications.

For 35 years, we have offered a wide range of oils that address your specific compressor lubrication and budget requirements. Our rigid specifications ensure that all FRICK oils are produced to the highest quality standards for premium performance and durability.

Proven Performance and Quality

FRICK oils offer superior performance lubrication to match your application. Synthetic oils offer superior breakdown characteristics, better lubricity, extended viscosities, and reduced oil change intervals.

By maintaining these high standards of quality and product excellence, FRICK oils have won the approval of the entire refrigeration industry. Since few end-users have the resources to analyze the contents of oil and test their durability, it is a good engineering practice to use oil that is backed by the experience of the leading refrigeration equipment manufacturer.

FRICK Compressor Oils Deliver:

- Highest quality, ensuring lubricity at designed operating temperatures and pressures
- Chemically stable at designed operating conditions
- Resistant to high temperature breakdown
- · High flash points
- Low moisture content
- Low pour points to resist congealing in condensers and evaporators
- · Exceptionally wax free
- Formulated to proper viscosities for specific applications

FRICK® - PureOil™ Formulations Focusing on Application and Analysis

Choosing the Correct Oil Formulation

Oil formulations are the lifeblood of an industrial refrigeration system. As such, choosing the correct oil formulation for a specific application is one of the most important decisions to having and maintaining an efficient, long lasting industrial refrigeration system. It requires careful consideration of all aspects of the oil formulation, it's additives, and how they react throughout the entire refrigeration system.

FRICK has spent much time and effort developing, testing and qualifying our refrigeration oils, considering all of these aspects. FRICK Industrial Refrigeration is not able to approve or recommend refrigeration oils other than FRICK PureOil™ formulations.

We understand there are many refrigeration oils on the market and that plant owners and operators may at times elect to use non-FRICK oil formulations for various reasons. However by doing so they take on a portion of the responsibility for the performance and reliability of the compressor and the system.

FRICK cannot accept responsibility for compressor reliability, system performance, excessive oil carryover, foaming, waxing or other oil related issues that may occur from using oil formulations other than FRICK PureOil™ formulations.

In the event of a lubrication related compressor or system failure, FRICK will analyze the operational data and failed parts. If the failure is determined to be due to improper lubrication or lubricant compatibility, warranty may be denied.

(From NS-03-20; January 21, 2020)

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Oil Analysis for Reliable Performance

Regularly scheduled analysis of your FRICK compressor's oil is a valuable aid in assessing its internal mechanical condition. The presence of harmful acids, corrosion causing water, corrosion products, and metal particles indicating abnormal parts wear, are all detected by chemical analysis.

Oil analysis can identify the need to tear down and visually inspect specific compressor parts, so conditions can be remedied during scheduled maintenance before they become expensive-to-repair problems. Using this proactive approach, you can extend the life of your equipment, minimize unplanned downtime and lower your operating costs while at the same time keeping your system at its peak performance.

When you choose genuine FRICK oil analysis kits, you're working with an industry-trusted provider who has the ability to fully analyze the contents of your oil and provide a detailed report containing full spectrochemical analysis along with viscosity, water, and total acid content. All reports are available electronically with a very short turnaround time! To get your FRICK Oil Anaylsis Kit, order part number - 333Q0001853.



A PureOil™ to Meet Your Requirements

Ammonia Compressor Oils

FRICK® #3

Excellent medium/heavy-weight, hydrogenated mineral-based oil for ammonia refrigerant. FRICK #3 oil has proven its versatility in thousands of reciprocating and screw compressor applications worldwide over the past 30 years. It is specially formulated with base oil and additives to meet our specifications. FRICK #3 oil offers greater thermal stability than naphthenic products and better lubricity and viscosity in ammonia applications, and is a cost-effective alternative to most ammonia refrigerant applications. Recommended evaporator temperatures are -35°F (-37C) and above.

FRICK® #9

Premium semisynthetic hydro-treated oil designed for ammonia applications. FRICK #9 oil provides high thermal stability for improved breakdown characteristics and extended service intervals. FRICK #9 oil is less volatile and less soluble in ammonia resulting in decreased oil foaming for better compressor lubrication and lower oil carryover from the oil separator. This oil's higher viscosity results in less bearing wear than pure mineral based naphthenic oils. Recommended evaporator temperatures are -50°F (-45C) and above. FRICK #9 is registered as a lubricant where there is no possibility of food contact (H2) in and around food processing areas.

FRICK® #9ST

Similar to FRICK #9 but with additional seal treating properties. FRICK #9ST is specially blended to condition O-rings in ammonia systems changing from naphthenic oils to higher quality paraffinic oils. This oil helps extend the life of elastomers and reduce leaks.

FRICK® #11

Is registered by NSF as an (H1) lubricant suitable for incidental contact in and around food processing areas. FRICK #11 is not suitable to retrofit systems that have operated on mineral oil due to risk of O-ring shrinkage. Recommended for evaporator temperatures of -80°F (-62C) and above. NSF H1 rated.



FRICK® 11ST

A premium version of FRICK #11, blended to condition O-rings in ammonia systems that have operated on mineral oils. This product is also compatible with mineral oils and equipment designed for mineral oils. The seal treatment (ST) in the formulation reduces the risk of seal leakage caused by O-ring shrinkage in retrofit of systems that have operated on mineral oils. FRICK #11ST is recommended for evaporator temps of -70°F (-57C) and above, and meets the requirements for a lubricant where there is no possibility of food contact (H2) in and around food processing areas.

HCFC Refrigerant Oils

FRICK® #2A

Excellent medium-weight, mineral-base oil for halocarbon refrigerants. FRICK #2A oil is refined free of waxes that may congeal or precipitate at low evaporator temperatures. This oil has a naturally low pour point requiring no pour point depressants and a natural affinity to halocarbon refrigerants for good oil return and heat transfer. It is recommended for evaporator temperatures -50°F and above. FRICK® #2A oil offers the lowest,first-cost alternative for halocarbon refrigerant applications.

HFC Refrigerant Oils

FRICK® polyolester (POE)

POE-based synthetic lubricants are especially suited for HFC refrigerants, R-134A, R-507, R-404 and the new refrigerant blends. FRICK synthetic oils are custom blended with additives for oxidation inhibition, corrosion protection, defoaming, and antiwear. Synthetic oils have extremely low pour points which make them specially suited for low temperature refrigeration applications. FRICK synthetic oil's high thermal stability resists breakdown and extends service intervals. Consult factory for application assistance.

FRICK® #13

Premium quality ester-based synthetic oil. FRICK #13 oil is recommended for HFC refrigerant. Never use with ammonia.

FRICK® #13B

Premium quality ester-based synthetic oil. FRICK #13B oil is recommended for HFC refrigerant applications where higher viscosity is required. Particularly suited for variable speed drives, high evaporator temperatures, and high refrigerant dilution of the oil. Never use with ammonia.

FRICK PureOil™ Compatibility and Safety

Compatibility

FRICK oils are compatible with the standard materials utilized in refrigeration systems. Changing from one type of oil to another on equipment which has operated in the field may cause shrinkage of elastomers and could cause leaks. Replacement of leaking elastomers is required if this occurs. Consult factory for details.

Safety Data Sheets

Safety Data Sheets (SDS) are available from FRICK Genuine Parts Center, phone 800-336-7264, or email frickparts@jci.com

FRICK COMPRESSOR OILS					
OIL TYPE	RECOMMENDED APPLICATIONS FOR FRICK REFRIGERANT OILS(1)		ORDERING INFORMATION		
	REFRIGERANT(2)	MIN. SUCTION TEMPERATURE °F	5 GALLON	55 GALLON	330 GALLON TOTE (3)
#2A	HCFC	-50°	111Q0550019	111Q0550020	333Q0001866
#3	R-717	-35°	111Q0550001	111Q0550010	333Q0001861
#9	R-717	-50°	333Q0000850	333Q0000849	333Q0001862
#9ST	R-717	-50°	333Q0001905	333Q0001904	-
#11	R-717	-80°	333Q0000852	333Q0000851	333Q0001863
#11ST	R-717	-70°	333Q0001907	333Q0001906	-
#13	HFC	N/A	333Q0001253	333Q0001254	_
#13B	HFC	N/A	333Q0001938	333Q0001937	-
SHIPPING WEIGHT:			40 lbs	466 lbs	2,720 lbs

OIL ANALYSIS KIT 333Q0001853 TUBE OF ODP MOTOR GREASE 333Q0001860

Notes

- 1. For specific application questions, consult factory.
- $2.\ \mbox{For gases}$ and refrigerants not listed, consult factory.
- 3. Reusable Drain Valve for Tote 333Q0001865

▲ WARNING

DO N OT M IX O ILS of d ifferent b rands, manufacturers, or types. Mixing of oils can cause excessive oil foaming, nuisance oil level cutouts, oil pressure loss, gas or oil leakage and catastrophic compressor failure.

NOTICE

The Frick® oil charge ship ped with the unit is the bes t suited lubricant for the conditions specified at the time of purchase. For more information, please contact the FRICK Parts Center Customer Service Group: 800-336-7264 or email frickparts@jci.com



We promise to go further.

SINGLE SOURCE INDUSTRIAL REFRIGERATION SOLUTIONS

World-Class Solutions

FRICK creates confident customer experiences with our best-in-class solutions.

Reliably Cold

FRICK is synonymous with refrigeration - we have generations of experience building refrigeration solutions.

Unrivaled Expertise

FRICK offers quality that is unrivaled in the industry.

























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100 Cumberland Valley Avenue · Waynesboro, PA 17268 USA 717-762-2121 · www.FRICKcold.com

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