



Goncord Chemical (Singapore) Pte Ltd

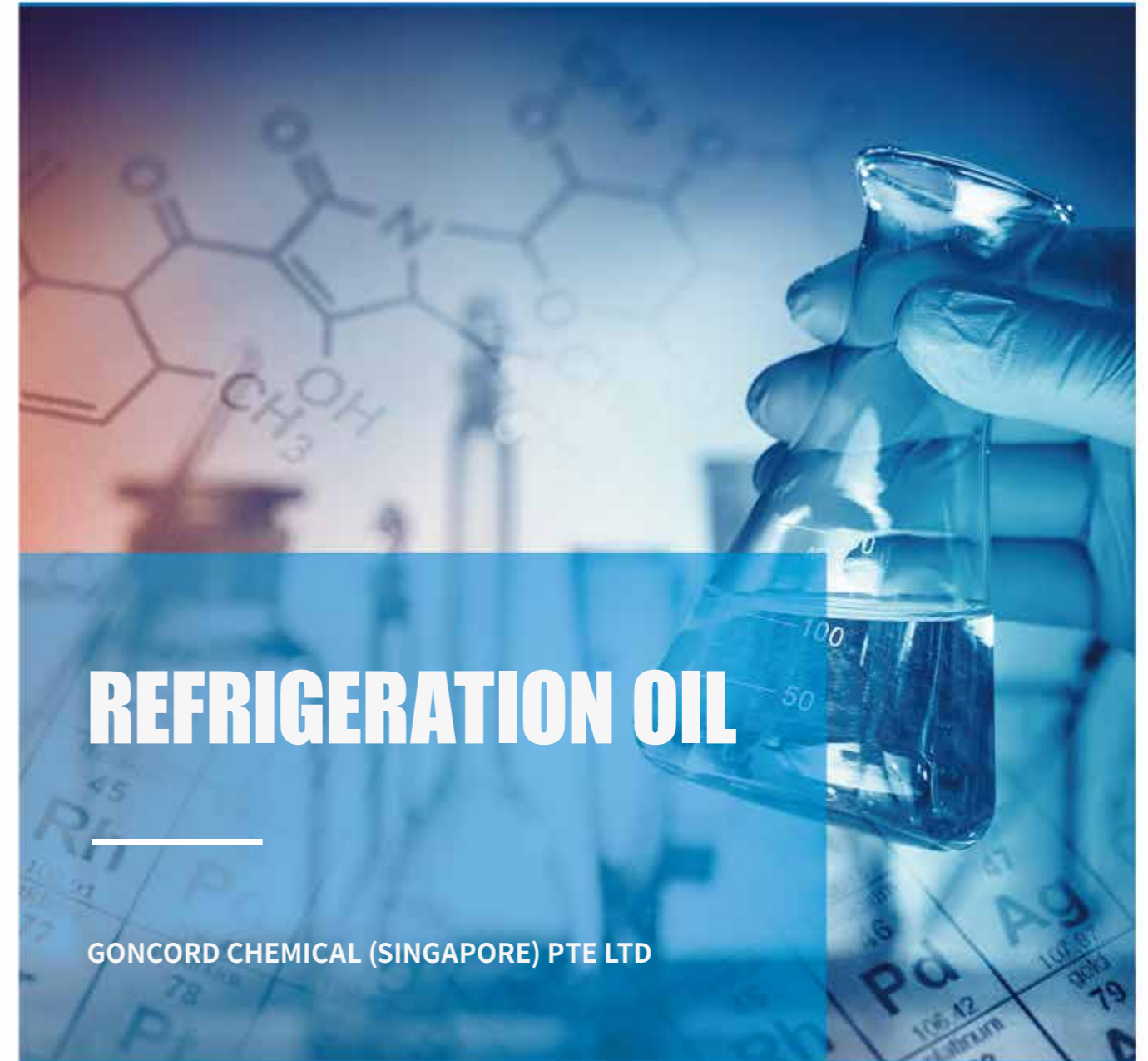
Entrepreneur Business Centre
18 Kaki Bukit Road 3 #02-05
Singapore 415978
Tel: +65 6742 5995
sales@goncordchemical.com
www.goncordchemical.com



The product images in this brochure are for reference only. The final product may vary. Please consult your local distributor for more details.
Catalog Printing Version 1.9 - Sep 2024



www.goncordchemical.com



REFRIGERATION OIL

GONCORD CHEMICAL (SINGAPORE) PTE LTD





Shaping a Greener, Low-Carbon Future



Goncord Chemical: Pioneering Sustainable Refrigeration

The refrigeration industry is experiencing rapid global growth, with a surge in demand for environmentally friendly solutions. Amid growing concerns about resource depletion and environmental impact, low-GWP refrigerants are becoming the preferred choice for equipment manufacturers.

Meeting the Evolving Needs of Refrigeration

As refrigerant manufacturers develop new products with zero ODP (Ozone Depletion Potential) and low GWP, more stringent demands are placed on the performance of lubricants. Goncord Chemical, a leading manufacturer of refrigeration compressor lubricants, is at the forefront of this green revolution. Our products, made from biodegradable plant-based materials, meet the exacting performance specifications of today's refrigeration equipment. With deep-rooted partnerships with renowned compressor manufacturers, Goncord Chemical has achieved industry-leading standards in multiple product technologies. Our SynCold refrigeration lubricant series, encompassing 34 grades, offers comprehensive technical support and service.

Committed to Innovation and Sustainability

Backed by a seasoned R&D team, advanced facilities, and a robust technical service network, our research center is dedicated to meeting the industry's high standards and diverse product requirements. Goncord Chemical is ISO 9001, ISO 14001, and ISO 45001 certified, adhering to EU RoHS environmental regulations and NSF food-grade safety standards.

Our Mission

To contribute to a more sustainable future, Goncord Chemical is committed to providing innovative, low-carbon refrigeration lubricants. Through continuous innovation and breakthroughs, we are shaping the future of refrigeration technology.

Innovative Refrigeration Oil Development: A Molecular Approach

Traditionally, the development of refrigeration oils has often been limited to conventional techniques. However, the emergence of new refrigerants and diverse operating conditions demands a more advanced approach.

Drawing on Goncord extensive experience in synthetic chemistry and collaboration with petroleum research experts, we have embarked on a molecular-level approach to refrigeration oil development. By carefully designing and modifying molecular structures, we have created innovative compounds that address the specific requirements of modern refrigeration systems.

Our tailored product solutions offer superior performance, efficiency, and compatibility with various refrigerants, ensuring optimal system operation.



SynCold® RLD & RL & RLT Series POE Based Lubricants

Environmentally Friendly, Energy-Efficient, Reliable, and Stable

Formulated with proprietary polyol ester (POE) and unique additives, these lubricants offer exceptional lubricity, wear resistance, chemical stability, and hydrolysis stability. SynCold RLD, RL and RLT are miscible with HFC and HFO refrigerants and is recommended for HVAC, commercial, and industrial refrigeration applications.

Product	Kinematic Viscosity @ 40°C (cst)	Kinematic Viscosity @ 100°C (cst)	Density@20°C (kg/m³)	Viscosity Index	Flash Point (°C)	Pour Point (°C)	Applications
Method	GB/T 265	GB/T 265	GB/T1884 1885	GT/T 1995	GB/T 3536	GB/T3535	
SynCold® RLD Series							
SynCold® RLD22	20.7	4.3	1026.5	122	228	-52	Specifically for house-hold refrigerators house-hold air conditioners, industrial refrigeration systems, and all applications recommended to use HFCs refrigerants. Compatible with HFCs, HCFCs, CFCs, and HCs refrigerants. Recommended for reciprocating, screw, rotary, centrifugal, and scroll compressors.
SynCold® RLD32	32.5	5.7	982	119	252	-55	
SynCold® RL Series							
SynCold® RL32	33.3	6.0	1024	130	235	-50	Specifically designed for the lubrication of refrigeration compressors. Compatible with HFCs, HCFCs, and HFOs refrigerants. Recommended for reciprocating, screw, rotary, centrifugal, and scroll compressors.
SynCold® RL46	45.8	7.3	1019	123	245	-50	
SynCold® RL68	67.2	9.2	1004	114	252	-45	
SynCold® RL100	98.2	11.9	1005	113	250	-39	
SynCold® RL120	116.9	12.7	987	102	262	-36	
SynCold® RL150	147.3	15.4	1000	107	265	-33	
SynCold® RL170	174.7	17.3	1002	107	270	-30	
SynCold® RL220	224.2	21.5	1002	115	278	-30	
SynCold® RL320	318.2	28.2	997	119	290	-27	
SynCold® RLT Series							
SynCold® RLT 68GX	64.1	7.8	955	85	246	-40	Specifically tailored to meet the requirements of commercial and industrial refrigeration and air conditioning equipment manufacturers. Compatible with HFCs, HCFCs, HFO, and other refrigerants. Recommended for use in reciprocating, screw, rotary, centrifugal, and scroll compressors.

SynCold® AB Series Alkylbenzene Based Lubricants

Stable Operating Performance

Formulated with synthetic alkylbenzene base oil and advanced additives, this lubricant offers excellent thermal and chemical stability. It exhibits good miscibility with refrigerants such as R22 and HCFC blends. Furthermore, the lubricant can be customized to meet the needs of systems that operate in both high and low temperature environments within a single

Product	Kinematic Viscosity @ 40°C (cst)	Kinematic Viscosity @ 100°C (cst)	Density@20°C (kg/m³)	Flash Point (°C)	Pour Point (°C)	Applications
Method	GB/T 265	GB/T 265	GB/T1884 1885	GB/T 3536	GB/T3535	
SynCold® AB Series						
SynCold® AB32	32.2	5.0	906	210	-50	Specifically designed for commercial and industrial refrigeration and air conditioning compressors. Compatible with CFCs, HCFCs, R717, and R600a refrigerants. Recommended for use in reciprocating, screw, rotary, centrifugal, and scroll compressors.
SynCold® AB46	47.1	6.2	882	215	-48	
SynCold® AB56	56.4	7.2	883	220	-46	
SynCold® AB68	66.4	8.1	884	226	-45	
SynCold® AB100	98.5	10.6	899	238	-40	



SynCold® SH & PAO Series Polyalphaolefins Based Lubricants

Lubrication Solutions for Harsh Operating Conditions

Developed specifically for nitrogen-based refrigeration systems using synthetic polyalphaolefins (PAO) and specialized additives, these refrigeration lubricants offer significantly lower evaporation loss compared to mineral-based lubricants. They also exhibit excellent low-temperature fluidity and a longer service life. Suitable for hydrocarbon refrigerants (R600/R600a) and can also be used in CO2 systems (possessing a certain degree of deep solubility in CO2).

Product	Kinematic Viscosity @ 40°C (cst)	Kinematic Viscosity @ 100°C (cst)	Density@20°C (kg/m³)	Viscosity Index	Flash Point (°C)	Pour Point (°C)	Applications
Method	GB/T 265	GB/T 265	GB/T1884 1885	GT/T 1995	GB/T 3536	GB/T3535	
SynCold® SH Series							
SynCold® SH46	45.2	6.6	872	103	216	-52	Specifically designed for commercial and industrial refrigeration and air conditioning compressors. Compatible with refrigerants such as R717 (ammonia), R290 (Propane) and R744 (CO2). Recommended for use in reciprocating and screw-type compressors.
SynCold® SH68	68.2	8.6	875	100	225	-45	
SynCold® PAO Series							
SynCold® PAO46	45.2	7.6	843	126	245	-60	Specifically designed for commercial and industrial refrigeration and air conditioning compressors. Compatible with refrigerants such as R717 (ammonia), R290 (Propane), and R744 (CO2). Recommended for use in reciprocating and screw-type compressors.
SynCold® PAO68	66.4	9.9	845	135	265	-52	
SynCold® PAO100	98.5	13.3	851	132	275	-54	



Product Packaging



SynCold® PAG Series

Polyalkylene Glycol Based Lubricants

Stable Operation, High Efficiency

Formulated with polyalkylene glycol and specialty additives, this PAG lubricant is designed to withstand dilution by carbon oxides and other compressed gases, especially in flooded screw compressors. It offers exceptional lubricity, thermal stability, shear stability, low ash content, and a high viscosity index.

Product	Kinematic Viscosity @ 40°C (cst)	Kinematic Viscosity @ 100°C (cst)	Density@20°C (kg/m³)	Viscosity Index	Flash Point (°C)	Pour Point (°C)	Applications
Method	GB/T 265	GB/T 265	GB/T1884 1885	GT/T 1995	GB/T 3536	GB/T3535	
SynCold® PAG Series							
SynCold® PAG46	44.5	9.0	986	192	192	-52	Specifically designed for car, automotive, commercial, and industrial refrigeration and air conditioning compressors. Compatible with HFCs, HFOs, and CO2 refrigerants. Recommended for reciprocating, screw, rotary, centrifugal, and scroll compressors.
SynCold® PAG68	71.5	13.9	1022	209	239	-48	
SynCold® PAG100	102	18.8	1014	215	215	-45	
SynCold® PAG150	148	25.2	1020	220	220	-42	



SynCold® DRA & GS & DRG Series

Naphthenic Based Lubricants

Consistent operational performance

Formulated with carefully selected high-refinement naphthenic base oils, this product offers outstanding performance and extended service life for modern refrigeration systems. It meets the demands of compressor OEM manufacturers under extreme lubrication conditions.

The product contains no wax components, which prevents sediment formation when combined with HCFCs, CFCs, and low-GWP natural refrigerants. It provides enhanced chemical and thermal stability, ensuring consistently clean operational performance over time.

Product	Kinematic Viscosity @ 40°C (cst)	Kinematic Viscosity @ 100°C (cst)	Density@20°C (kg/m³)	Flash Point (°C)	Pour Point (°C)	Applications
Method	GB/T 265	GB/T 265	GB/T1884 1885	GB/T 3536	GB/T3535	
SynCold® DRA Series						
SynCold® DRA32H	32.1	4.6	897	175	-42	Specifically developed for commercial and industrial refrigeration and air conditioning compressors, formulated with naphthenic oils and superior performance additives.
SynCold® DRA46H	46.1	5.5	899	200	-39	
SynCold® DRA68H	68.1	6.8	896	210	-33	
SynCold® GS Series						
SynCold® 3GS	32	4.5	907	172	-42	Specifically developed for compressors in commercial and residential refrigeration and air conditioning systems, this formulation uses synthetic naphthenic lubricants compatible with refrigerants such as CFCs, HCFCs, R717, R600a, and R290. It is recommended for use in screw, reciprocating, and scroll compressors.
SynCold® 3.5GS	46	5.5	908	176	-38	
SynCold® 4GS	56	6.1	910	180	-36	
SynCold® 4.5GS	68	6.8	913	183	-30	
SynCold® 5GS	100	8.4	915	185	-25	
SynCold® DRG Series						
SynCold® DRG5H	5	-	860	150	-65	Specifically developed for fully enclosed refrigeration compressors, compatible with hydrocarbon refrigerants (especially R600a). Recommended for fully enclosed reciprocating compressors.
SynCold® DRG10	10	-	865	152	-55	