

# Polyol Ester (POE) Lubricant



## Emkarate® RL Lubricant

The Emkarate family of polyol ester refrigeration lubricants are designed specifically for use with HFC refrigerants. They are available in a range of viscosities. They have excellent thermal and chemical stability, and they are compatible with a wide range of elastomers, polymeric materials, and other materials of construction. Fully miscible and compatible with mineral oils and alkylbenzene lubricants, as well as with CFCs, HCFCs, and HFCs.

Emkarate RL	Viscosity	1 Quart	1 Gallon	5 Gallon	53 Gallon
22H	100 SUS		4313-46		
32H	150 SUS	4314-44	4314-46	4314-45	4314-41
32HB	150 SUS			4314-62	
32-3MAF	150 SUS	4314-64	4314-66	4314-65	4314-67
46H	200 SUS		4315-46		4315-41
68H	300 SUS	4316-44	4316-46	4316-45	4316-41
68HB	300 SUS		4316-86	4316-85	
68HP	300 SUS		4316-76		4316-71
85HB	425 SUS		4316-91		
100E	500 SUS		4317-66		4317-61
100H	500 SUS		4317-46		
170H	850 SUS		4318-26	4318-25	4318-21
220H+	1100 SUS		4318-66	4318-65	4318-61
220XL	1100 SUS			4318-75	

## Mineral Oil



## C-3s, C-4s, C-5s Refrigeration Oil

These are mineral naphthenic lubricants manufactured by Calumet Lubricant Company and available in three viscosities. They are specifically designed for today's high performance air conditioning and refrigeration compressors using CFC and HCFC refrigerants. These compressors run at higher speeds and generate higher temperatures, and as a result, they require better lubrication. Use of these oils will ensure continued efficient operation.

Nu-Calgon	Viscosity	1 Gallon	5 Gallon	55 Gallon
C-3s	150 SUS	4303-07	4303-05	4303-01
C-4s	300 SUS	4304-07	4304-05	4304-01
C-5s	500 SUS	4305-07		4305-01

## Polyvinyl Ether (PVE) Lubricant



## Idemitsu Polyvinyl Ether Lubricant

PVE lubricants provide for increased stability and lubrication. They do not hydrolyze in the presence of moisture, a very important feature in HVACR applications. Additionally, they are compatible with other refrigeration oils and process fluids. PVE lubricants also exhibit compatibility and performance with frequently used anti-wear additives.

Idemitsu	Viscosity	1 Quart
FVC32D	150 32 SUS	4319-14
FVC68D	300 68 SUS	4319-24

## Polyalkylene Glycol Oil



## PAG Oil

Polyalkylene glycol (PAG) oil is a synthetic compressor lubricant used by OEMs for R-134a refrigerant and other specialty applications. It has outstanding lubricity and biodegradable properties, and recently has been FDA approved for use with equipment that may come in contact with food.

Zerol RFL-68EP	5 gallon pail	4316-95
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## Alkylbenzene Oil



### Zerol® Alkylbenzene Refrigeration Oil

Zerol Refrigeration Oil is recommended for use in all refrigeration and air conditioning applications using CFC and HCFC refrigerants. It is highly recommended by refrigerant and compressor manufacturers for use with R-22 and other HCFC blends such as R-409A as it provides many distinct advantages: excellent miscibility, excellent thermal stability, and low temperature performance compatibility with mineral oils. It is the oil of choice for R-22 and R-502.

Zerol	Viscosity	1 Gallon	5 Gallon	55 Gallon
150	150 SUS	4310-07	4310-05	4310-01
200TD	200 SUS	4308-07	4308-05	4308-01
300	300 SUS	4311-07	4311-05	4311-01
400CA	400 SUS		4311-65	
500	500 SUS		4312-05	

## Vacuum Pump Oil



### Vacuum Pump Oil

Nu-Calgon's Vacuum Pump Oil is a quality, high-grade lubricant that performs at the deepest vacuum. It has a very low vapor pressure, and it has excellent lubricity for complete surface protection. It contains no additives or detergents.

1 pint bottle	4383-34
1 quart bottle	4383-24
1 gallon bottle	4383-07

## Refrigeration Oil Products



### Refrigeration Oil Charging Pump

An oil pump for charging refrigeration oil into a system, even while it's running. This pump can be used for 1 gallon, 2.5 gallon, and 5 gallon containers. Incorporates an automatic bleed valve that keeps pressure equalized inside the container and includes a tapered rubber adapter that fits all container openings without the need for additional adaptors.

1 each	4814-40
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### Total Lube Refrigeration Oil Test Kit

Have a professional lab analyze the oil to help detect potential problems such as metal wear or burnouts. The analysis will provide information on the oil's moisture, total acid number, viscosity, color, and spectrochemical analysis on 20 plus metals and compounds. Help prevent potential downtime, burnouts, and costly oil changes by incorporating regular testing of the refrigeration oil.

1 each	4996-0
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### Oil Refractometer

The Oil Refractometer is a precision optical instrument that allows for the rapid and accurate determination of the refractive index of oil solutions. It will specifically assist in determining the percent of residual oil remaining in a refrigeration system when converting it to a new refrigeration oil. Such retrofits require converting the mineral oil to a polyol ester (POE) or polyalkylene glycol (PAG), an alkylbenzene lubricant (Zerol®) to a POE, or a mineral oil to an alkylbenzene.

1 each	4815-0
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### CanVerter®

CanVerter is a hand-held pump used to remove or add oil to hermetic compressors. Easy to use; each stroke pumps 1 ounce of oil.

1 each	4814-0
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