



M.S.K INTERNATIONAL
A Complete Solution for your Industrial Requirements
DEALS IN REFRIGERATION & AIR CONDITIONING CONTROLS & PARTS, REFRIGERANT GASES, HOSE, FITTINGS & VALVES



ERRECOM
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

AIR CONDITIONING & Refrigeration Chemical *Solutions*

Refrigeration Lubricants, Vacuum Pump Oils & Coil Cleaners.
Made in Italy  Original

POE-32, 55, 68, 100, 170 & 220
PAG-46 & 100 | Mineral Oil-55/4, 68 & 100/5
ISO-68 | Coil Cleaner-PSD & SGP



+92 333 3095 852 | +92 321 0820 786

Shop #8, Ground Floor Falak Corporate City, Opposite Bolten
Market Post Office Karachi, 74200.



QUALIFIED DEALER CERTIFICATE

We certify that

M.S.K International

is our Qualified Dealer
for HVAC Market in Pakistan

Therefore it can carry out after-sales service,
technical backup and supply our products.

Valid until

2nd OCT 2027

Luca Ronga
President


ERRECOM SPA

ERRECOM[®]
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

Index Content

S No.	Description	Page
1.	POE 32 (Polyolester Oil — Refrigeration Lubricant)	1
2.	POE 55 (Polyolester Oil — Refrigeration Lubricant)	2
3.	POE 68 (Polyolester Oil — Refrigeration Lubricant)	3
4.	POE 100 (Polyolester Oil — Refrigeration Lubricant)	4
5.	POE 170 (Polyolester Oil — Refrigeration Lubricant)	5
6.	POE 220 (Polyolester Oil — Refrigeration Lubricant)	6
7.	PAG 46 (Polyalkylene Glycol Oil)	7
8.	PAG 100 (Polyalkylene Glycol Oil)	8
9.	Mineral Oil 55/4	9
10.	Mineral Oil 68	10
11.	Mineral Oil 100/5	11
12.	ISO 68 (Vacuum Pump Oil)	12
13.	PSD Coil Cleaner	13
14.	SGP Coil Cleaner	14
15.	Flushing and Leak Straw	15
16.	Descalers	16

POE 32

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 32 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 32 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 32 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO. In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur [Figure 1]. For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture:

Art.-Nr.

OL6012.K.P2
OL6012.I.P2
OL6012.P.P2
OL6012.V

Description

1 LTR
4LTRS
5LTRS
20LTRS

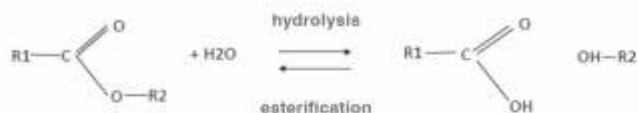


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features – Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.
Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 32
ISO VG	/	32
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	32
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	5,5
Viscosity Index	ASTM-D2270	140
Pour Point (°C)	ASTM-D97	-50
Flash Point (°C)	ASTM-D93	230
Density at 15°C (g/cm3)	ASTM-D1298	0,955
Moisture Level (ppm)	ASTM-D6304	50
Total Acid (mg KOH/g)	ASTM-D974	< 0,03

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

POE 55

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 55 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 55 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 55 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO. In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur (Figure 1). For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture.

Art.-Nr.

OL6055.K.P2

OL6055.I.P2

OL6055.V

Description

1LTR

4LTRS

20LTRS

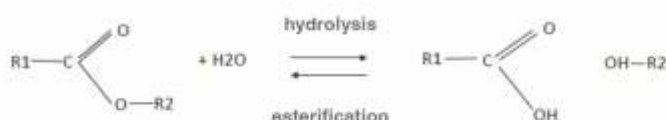


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features - Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.

Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 55
ISO VG	/	55
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	53.9
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	8.2
Viscosity Index	ASTM-D2270	123
Pour Point (°C)	ASTM-D97	-42
Flash Point (°C)	ASTM-D93	240
Density at 15°C (g/cm³)	ASTM-D1298	0.965
Moisture Level (ppm)	ASTM-D6304	50
Total Acid (mg KOH/g)	ASTM-D974	< 0.03

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

POE 68

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 68 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 68 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 68 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO. In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur [Figure 1]. For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture.

Art.-Nr.

OL6016.K.P2
OL6016.I.P2
OL6016.P.P2
OL6016.V

Description

1 LTR
4LTRS
5LTRS
20LTRS

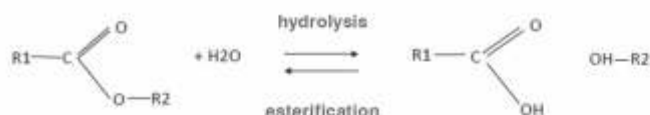


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features – Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.
Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 68
ISO VG	/	68
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	68
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	9,5
Viscosity Index	ASTM-D2270	140
Pour Point (°C)	ASTM-D97	-42
Flash Point (°C)	ASTM-D93	234
Density at 15°C (g/cm3)	ASTM-D1298	0,975
Moisture Level (ppm)	ASTM-D6304	50
Total Acid (mg KOH/g)	ASTM-D974	< 0,03

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

POE 100

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 100 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 100 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 100 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO. In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur (Figure 1). For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture.

Art.-Nr.

OL6017.K.P2
OL6017.I.P2
OL6017.P.P2
OL6017V

Description

1 LTR
4LTRS
5LTRS
20LTRS

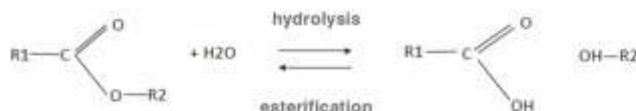


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features - Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.
Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 100
ISO VG	/	100
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	100
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	11.51
Viscosity Index	ASTM-D2270	110
Pour Point (°C)	ASTM-D97	-36
Flash Point (°C)	ASTM-D93	300
Density at 15°C (g/cm³)	ASTM-D1298	0.968
Moisture Level (ppm)	ASTM-D6304	75
Total Acid (mg KOH/g)	ASTM-D974	<0.04

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

POE 170

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 170 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 170 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 170 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO.

In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur [Figure 1]. For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture.

Art.-Nr.	Description
OL6020.I.P2	4LTR
OL6020.P.P2	5LTRS
OL6020.V	20LTRS

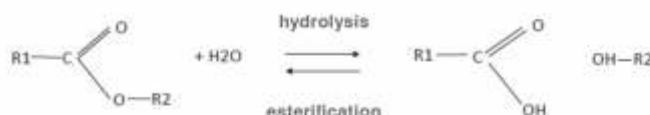


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features/Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in air conditioning and refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.
Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 170
ISO VG	/	170
Kinematic viscosity at 40°C (cSt)	ASTM-D445	170
Kinematic viscosity at 100°C (cSt)	ASTM-D445	16.66
Viscosity index	ASTM-D2270	100
Pour point (°C)	ASTM-D97	-36
Flash point (°C)	ASTM-D93	300
Density at 15°C (g/cm3)	ASTM-D1298	0.96
Moisture level (ppm)	ASTM-D6304	75
Total acid (mg KOH/g)	ASTM-D974	<0.04

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

POE 220

Refrigeration Lubricant



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's POE 220 is formulated with high-performance additives that provide the polyester base with high thermal, chemical, and hydrolytic stability. Due to its high viscosity index, POE 220 has excellent cold flow properties and a highly stable lubricating film under high temperature conditions.

Like all Errecom's POEs, POE 220 is ultra-dry and, as a result, its hygroscopicity is drastically reduced. POEs, in fact, tend to easily absorb atmospheric moisture, much faster than non-polar hydrocarbon-based refrigeration lubricants such as mineral oil, alkylbenzene and PAO.

In extreme cases, i.e. when they absorb a certain amount of water (over 50-100 ppm) and are working under particularly extreme operating conditions, hydrolytic decomposition reactions may occur [Figure 1]. For this reason, it is necessary to avoid contact with water or moisture during storage, handling, or operation. Precisely for this reason, all Errecom's POEs are packaged in plastic bottles and metal tanks that have been specially designed to protect oils against moisture.

Art.-Nr.

OL6021.I.P2

OL6021.P.P2

OL6021.V

Description

4LTR

5LTRS

20LTRS

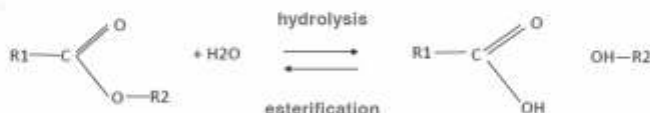


Figure 1: Hydrolysis of POE

Field of Application

HVAC/R (refrigeration lubricant for hermetic, semi-hermetic, open, and screw compressors, and turbochargers).

Features/Pluses

Features	Pluses
High viscosity index	Ensures excellent low temperature fluidity, no oily deposits and improved evaporator efficiency
Anti-wear additive	Ensures reduced compressor wear and maintenance costs
Excellent high temperature stability	Ensures cleaner evaporators, and reduced downtime and maintenance costs
Optimised miscibility with HFC - HFO - Hydrocarbon	Ensures high system efficiency and correct oil return in air conditioning and refrigeration systems

Instructions

Recommended operating temperature: 20°C-25°C.

Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Method	POE 220
ISO VG	/	220
Kinematic viscosity at 40°C (cSt)	ASTM-D445	226,2
Kinematic viscosity at 100°C (cSt)	ASTM-D445	19,34
Viscosity index	ASTM-D2270	97
Pour point (°C)	ASTM-D97	-30
Flash point (°C)	ASTM-D93	318
Density at 15°C (g/cm³)	ASTM-D1298	0,975
Moisture level (ppm)	ASTM-D6304	75
Total acid (mg KOH/g)	ASTM-D974	<0,04

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

PREMIUM PAG 46

A/C Compressor Oil



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's Premium PAG 46 synthetic oil consists of a blend of water-insoluble polyalkylene glycols. Formulated with the best-performing additives for automotive applications, Premium PAG 46 guarantees the highest level of compressor lubrication. The Double End Capping technology also results in a PAG oil that is more stable and less exposed to chemical/physical degradation during its service life and optimal miscibility with the refrigerant gases normally used in vehicle A/C systems.

Art.-Nr.

OL6001.Q.P2
OL6001.K.P2

Description

250ML
1LTRS

Field of Application

Automotive

Features - Pluses

Features	Pluses
Double-end PAG technology with optimised miscibility in R12, R134a, R1234yf	Maximisation of oil return to the compressor ensuring maximum system efficiency
Outstanding EP performance, mainly derived from the space-filling model of the fluid	Excellent hydrodynamic and lubricating properties, minimising wear levels
Lower water absorption compared to classic PAGs	Excellent hydrodynamic and lubricating properties; low wear
Excellent thermal, chemical and hydrolytic stability	Improve system reliability and lifespan

Instructions

Recommended operating temperature: 20-25°C.
Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Reference Method	PREMIUM PAG 46
ISO VG	/	46
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	46
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	8,6
Viscosity Index	ASTM-D2270	184
Pour Point (°C)	ASTM-D97	-43
Flash Point (°C)	ASTM-D93	226
Density at 15°C (g/cm³)	ASTM-D1298	0,999
Moisture Level (ppm)	ASTM-D6304	300
Total Acid (mg KOH/g)	ASTM-D974	0,05

Refrigerant Gas Compatibility

Premium PAG 46 is compatible with the following refrigerant gases: R12, R134a, R1234yf.

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

PREMIUM PAG 100

A/C Compressor Oil



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

ERRECOM's Premium PAG 100 synthetic oil consists of a blend of water-insoluble polyalkylene glycols. Formulated with the best-performing additives for automotive applications, Premium PAG 100 guarantees the highest level of compressor lubrication.

The Double End Capping technology also results in a PAG oil that is more stable and less exposed to chemical/physical degradation during its service life and optimal miscibility with the refrigerant gases normally used in vehicle A/C systems.

Art.-Nr.

OL6003.K.P2

Description

1LTR

Field of Application

Automotive

Features - Pluses

Features	Pluses
Double-end PAG technology with optimised miscibility in R12, R134a, R1234yf	Maximisation of oil return to the compressor ensuring maximum system efficiency
Outstanding EP performance, mainly derived from the space-filling model of the fluid	Excellent hydrodynamic and lubricating properties, minimising wear levels
Lower water absorption compared to classic PAGs	Excellent hydrodynamic and lubricating properties; low wear
Excellent thermal, chemical and hydrolytic stability	Improve system reliability and lifespan

Instructions

Recommended operating temperature: 20-25°C.

Viscosity increases as temperature decreases.

Physical and Chemical Properties

Physical Quantity (Unit of Measurement)	Analytical Reference Method	PREMIUM PAG 100
ISO VG	/	100
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	100
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	21
Viscosity Index	ASTM-D2270	225
Pour Point (°C)	ASTM-D97	-40
Flash Point (°C)	ASTM-D93	230
Density at 15°C (g/cm³)	ASTM-D1298	0.993
Moisture Level (ppm)	ASTM-D6304	300
Total Acid (mg KOH/g)	ASTM-D974	0,05

Refrigerant Gas Compatibility

Premium PAG 100 is compatible with the following refrigerant gases: R12, R134a, R1234yf.

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

Mineral Oil 55/4



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

Errecom's mineral oils are highly refined hydrotreated naphthenic bases enhanced by additives that inhibit oxidation, rust and corrosion, ensuring:

- High ageing stability
- High viscosity index and low pour point (especially with lower viscosities)
- High demulsibility (rapid water separation)
- Very good resistance to foam formation and air entrainment
- Excellent low-temperature behaviour
- Good compatibility with: ammonia (NH₃), HCFC (e.g. R22), hydrocarbons (e.g. propane R290 and propylene R1270).

Art.-Nr.

OL6066.K.P2

OL6066.I.P2

Description

1LTR

4LTRS

The high solvent power and excellent low-temperature properties contribute to good floc points for the refrigerant-oil mixture. Errecom's mineral oil, thanks to its wax-free formulation, is characterised by a low pour point and good cold pour properties. At high temperatures, Errecom's Mineral Oil has a higher flash point than other products on the market along with high thermal and chemical stability. It does not corrode iron, copper, and aluminium. It is recommended for use in systems using hydrocarbon refrigerant gases, such as isobutane (R600a), ammonia (R717) and CFCs (R12 and R22).

Physical and Chemical Properties

Physical Quantity Measured (Unit of Measurement)	Analytical Reference Method	Mineral 55/4
ISO VG	/	55
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	55
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	6.2
Viscosity Index	ASTM-D2270	96
Pour Point (°C)	ASTM-D97	-32
Flash Point (°C)	ASTM-D93	198
Density at 15°C (g/cm ³)	ASTM-D1298	0.91
Moisture Level (ppm)	ASTM-D6304	18
Total Acid (mg KOH/g)	ASTM-D974	0.02
Colour	ASTM-D1500	-

Storage Instructions

Store below 20°C.
Keep away from open flame, heat sources and direct sunlight.
Store in a dry and cool place.
Do not store above 50°C.

Transport Conditions

This product is not regulated for transport according to ADR/RID, IMDG, ICAO/IATA.

Shelf Life

5 years from the date of production.
After this period, the product may still be used, contingent upon verification that its parameters comply with performance requirements.

Chemical substance inventory

Errecom's mineral oils are recorded in the following chemical inventories:

REACH	TSCA	DSL	ENCS	KECL	IECSC	PICCS	AICS	NZIOC
EU	USA	Canada	Japan	Korea	China	Philippines	Australia	New Zealand

01.03.2024

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

Mineral Oil 68



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

Errecom's mineral oils are highly refined hydrotreated naphthenic bases enhanced by additives that inhibit oxidation, rust and corrosion, ensuring:

- High ageing stability
- High viscosity index and low pour point (especially with lower viscosities)
- High demulsibility (rapid water separation)
- Very good resistance to foam formation and air entrainment
- Excellent low-temperature behaviour
- Good compatibility with: ammonia (NH₃), HCFC (e.g. R22), hydrocarbons (e.g. propane R290 and propylene R1270).

Art.-Nr.

OL6067.I.P2
OL6067.P.P2
OL6067.V

Description

4LTRS
5LTRS
20LTRS

The high solvent power and excellent low-temperature properties contribute to good floc points for the refrigerant-oil mixture. Errecom's mineral oil, thanks to its wax-free formulation, is characterised by a low pour point and good cold pour properties. At high temperatures, Errecom's Mineral Oil has a higher flash point than other products on the market along with high thermal and chemical stability. It does not corrode iron, copper, and aluminium. It is recommended for use in systems using hydrocarbon refrigerant gases, such as isobutane (R600a), ammonia (R717) and CFCs (R12 and R22).

Physical and Chemical Properties

Physical Quantity Measured (Unit of Measurement)	Analytical Reference Method	Mineral 68
ISO VG	/	68
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	68
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	6.6
Viscosity Index	ASTM-D2270	95
Pour Point (°C)	ASTM-D97	-30
Flash Point (°C)	ASTM-D93	200
Density at 15°C (g/cm ³)	ASTM-D1298	0.915
Moisture Level (ppm)	ASTM-D6304	17
Total Acid (mg KOH/g)	ASTM-D974	0.02
Colour	ASTM-D1500	1.0

Storage Instructions

Store below 20°C.
Keep away from open flame, heat sources and direct sunlight.
Store in a dry and cool place.
Do not store above 50°C.

Transport Conditions

This product is not regulated for transport according to ADR/RID, IMDG, ICAO/IATA.

Shelf Life

5 years from the date of production.
After this period, the product may still be used, contingent upon verification that its parameters comply with performance requirements.

Chemical substance inventory

Errecom's mineral oils are recorded in the following chemical inventories:

REACH	TSCA	DSL	ENCS	KECL	IECSC	PICCS	AICS	NZIOC
EU	USA	Canada	Japan	Korea	China	Philippines	Australia	New Zealand

01.03.2024

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com





M.S.K INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Mineral Oil 100/5

Mineral Oil for Air Conditioning and Refrigeration Systems



Art.-Nr.	Description
OL6068.I.P2	4LTRS
OL6068.P.P2	5LTRS
OL6068.T	20LTRS

MINERAL OIL 100/5 Lubricant by Errecom is composed by a Naphtenic base and Additives specially formulated to obtain better lubricity, chemical and thermal stability and an excellent protection against wear of the components of the Air Conditioning and Refrigeration Systems.

The pursued aims in the development of new ERRECOM lubricants are:

- Excellent Lubricant Ability;
- Hydrolytic Stability;
- High compatibility with the materials of all kind of Systems, both new and old ones (with a constant attention to their evolution over the time);
- Low Toxicity;
- Reduced Hygroscopicity and Anti-Humidity Additive;
- High Thermal Stability to Oxidation;
- High Solubility performances with Refrigerants;
- Optimal Miscibility with Refrigerants;

Method and Reference Unit	Value	Reference Method
ISO VG	100	-
Kinematic Viscosity @ 40°C (cSt)	99	ASTM-D445
Kinematic Viscosity @ 100°C (cSt)	8,8	ASTM-D445
Kinematic Index	94	ASTM-D2270
Freezing Point (°C)	-30	ASTM-D 97
Flash Point (°C)	220	ASTM-D 92
Density @ 15°C (g/cm³)	0,905	ASTM-D4052
Humidity Content (ppm)	10	ASTM-E 1064
Total Acidity (mg KOH/g)	0,02	ASTM-D 974
Color (APHA)	10	ASTM-D 1209
Sulphides	0,03	ASTM D2022

Errecom Mineral Lubricants are produced with the most refined naphthenic bases and new generation Additives, born from years of applications in Refrigeration.



Via Industriale, 14 - 25030 Corzano (BS) - ITALY - errecom.com

ISO 68 (Vacuum Pump Oil)



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

Errecom's Vacuum Pump Oils are blends of carefully selected mineral oils, with low vapour pressure and a tight distillation range to ensure the best lubrication performance for vacuum pumps.

Vacuum Pump Oils consist of hydrotreated naphthenic oils improved by additives that preserve the oil's resistance to natural degradation during its service life, extending it and reducing the sludge and deposit growth (oil fouling).

The pluses of using naphthenic base oils for this application are their high solvent power and excellent low-temperature properties that lead to good flow points for the refrigerant-oil mixture. Errecom's Vacuum Pump Oils are wax-free and characterised by a very low pour point, very good cold flow properties and high thermal and chemical stability, which guarantee effective corrosion and wear protection of internal metal surfaces.

Art.-Nr.	Description
OL1008.K.P2	1LTR
OL1008.P.P2	4LTRS

The main features of Errecom's Vacuum Pump Oils are:

- high thermal stability: it can be used in closed systems operating even at high temperatures and pressures avoiding the growth of deposits and sludges;
- high oxidation stability: it extends the charge in operation thus preventing the viscosity of the product;
- high hydrolytic stability: it protects the oil from decomposition, even in the presence of small percentages of water;
- good demulsibility: it quickly separates oil from the water that may have entered the system, further inhibiting the oxidation process;
- higher filterability even in the presence of water (compared to previous oils): it avoids filter clogging and extends filter replacement time;
- anti-corrosion and anti-rust power: it protects all metal components of the system;
- anti-foam properties: it avoids foam and air growth that would reduce the efficiency of the system due to the compressibility different from that of the oil.

Physical and Chemical Properties

Physical Quantity (unit of measurement)	Analytical Method	ISO 68	HIGH VISCOSITY ISO 46 HD
ISO VG	/	68	46
Kinematic Viscosity at 40°C (cSt)	ASTM-D445	67.9	46.8
Kinematic Viscosity at 100°C (cSt)	ASTM-D445	8.8	7.6
Viscosity Index	ASTM-D2270	102	133
Pour Point (°C)	ASTM-D97	-25	-16
Flash Point (°C)	ASTM-D93	220	225
Density at 15°C (g/cm³)	ASTM-D1298	0.877	0.845

Storage Instructions

Store below 20°C.
Keep away from open flame, heat, or direct sunlight.
Store in a dry and cool place.
Never expose to temperatures above 50°C.

Transport Conditions

This product is not regulated for transport according to ADR/RID, IMDG, ICAO/IATA.

Shelf life

5 years from the production date.
After this period, the product may still be used subject to successful checks on the performance requirements.

Chemical substance inventory

Errecom's Vacuum Pump Oils are recorded in the following chemical inventories:

REACH	TSCA	DLIS	ENCS	KECL	IECSC	PICCS	AICS	NZIOC
UE	USA	Canada	Japan	Korea	China	Philippines	Australia	New Zealand

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
errecom.com



PSD Coil Cleaner

Acid Cleaner for Condensers



M.S.K. INTERNATIONAL

A Complete Solution for your Industrial Requirements

EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

PSD Coil Cleaner is a concentrated descaling cleaner developed by Errecom for the complete cleaning of condensers. Its acidic formulation (pH = 2) makes it particularly effective at removing limescale from the metallic components of A/C outdoor units.

When diluted at a ratio of 1:3, it dissolves the most stubborn dirt residues in just 5 minutes and easily removes oxidation, salts, and deposits from condenser coils, as well as components made of aluminum, steel, and copper. The formula is completely safe for metals.

Not only does it descale and effectively clean condensers, but it also restores their original appearance. It is recommended to thoroughly rinse the condenser with plenty of water after use.

Art.-Nr.

AB1245.K.S1

AB1245.P.O1

Description

1 L SPRAY BOTTLE

5 L TANK

Features

- Specific for condensers.
- Ideal for restoring thermal exchange and system efficiency.
- Foam action effectively removes even the most stubborn dirt.
- Ensures a cost-effective and efficient cleaning result.

Instructions

1. Turn off the A/C system.
2. Dilute 1:3 with water.
3. Apply the product on the surface to be treated.
4. Wait for 5 minutes.
5. Rinse with plenty of water.

Physical and Chemical Properties

Property	Value
Aspect	Clear liquid
Colour	Red
Odour	Characteristic
Relative Density	1.01 ± 0.005 g/ml (at T = 20°C)
pH	2 ± 1

Categorisation and Labelling

This technical specification is only applicable when it comes with the current Safety Data Sheet.
In accordance with legal requirements, only the Safety Data Sheet contains current safety information.
The MSDS is available on request.

Safety Instructions

Avoid contact with skin and eyes. Avoid breathing vapours and mist.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not use empty containers before they have been cleaned.

Before pouring it into a container, make sure that it has been cleaned properly from any incompatible materials.

Storage Instructions

Store between +0°C e +40°C.

Store away from direct sunlight.

Keep away from food, beverage, and animal feed.

ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T: +39 030 9719096
www.errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

SGP Coil Cleaner

Universal Alkaline Cleaner - NSF Certified



M.S.K. INTERNATIONAL
A Complete Solution for your Industrial Requirements
EXCLUSIVE DISTRIBUTOR FOR PAKISTAN



Description

SGP COIL CLEANER is a concentrated universal alkaline cleaner formulated by Errecom for thorough cleaning of A/C filters, evaporators and condensers. Thanks to its formulation with biodegradable surfactants, it performs a strong but safe cleaning action on all system surfaces and components, restoring their efficiency. SGP COIL CLEANER effectively degreases and removes even the most stubborn deposits of organic residues, grease, dust, pollen and smog. Its formulation does not contain foaming agents, providing rapid rinsing, reducing water consumption. It contains corrosion inhibitors that extend the life of the system.

Art.-Nr.

AB1244.P.01

Description

5 L TANK

Features

- Specific for A/C filter, evaporator and condenser cleaning.
- Restores heat transfer and, as a consequence, the efficiency of the system.
- Removes even the most stubborn residues of grease, dust, pollen and smog.
- NSF certified (K5).
- Contains biodegradable surfactants.
- Powerful anticorrosion action.
- Scent: lime.

Dilution

- 1:15 dilution - A/C filter cleaning
- 1:10 dilution - Evaporator cleaning
- 1:6 dilution - Condenser cleaning

A/C Filter Application

1. Switch off the system.
2. Remove the A/C filter.
3. In case of heavy-duty dirt, remove most of the deposit by shaking A/C filter, ensuring not to come into contact with the removed dust.
4. Dilute 1:15 with water.
5. Evenly spray the product directly onto the A/C filter in order to obtain an even coverage. One spray covers around 10 cm.
6. Wait for 5 minutes.
7. Soak the A/C filter in water and rinse thoroughly.
8. Let the A/C filter dry.
9. Replace the A/C filter in the indoor unit.



Evaporator Application

1. Switch off the system.
2. Dilute 1:10 with water.
3. Apply the product on the entire surface to be treated.
4. Wait for 5 minutes.
5. Rinse with water.
6. Wipe with a soft cloth, when necessary.



ERRECOM SPA Via Industriale 14 - 25030 Corzano - (BS) - Italy - T. +39 030 9719096
www.errecom.com

ERRECOM®
AIR CONDITIONING & REFRIGERATION CHEMICAL SOLUTIONS

**M.S.K INTERNATIONAL**

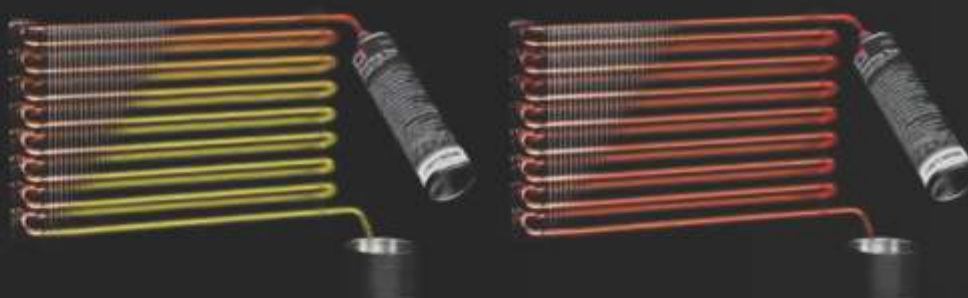
A Complete Solution for your Industrial Requirements

Flushing of Refrigerant Lines and AC/R Components

NEWS 2023

- Certifies the proper cleaning of condensers, evaporators, and refrigerant lines.
- Detects contaminants (moisture, acidity, rust, metal filings, dust, and sand) in AC/R system components and pipes.
- Clear and instant result: if the colour changes, the system is not clean; if the colour does not change, you can start the system.

Art.-Nr.	Description	€	12	1008
TR1233.YW.M0	750 mL can with rubber cone	-	12	1008
TR1233.K.01	1 L metal bottle	-	02	672
TR1233.P.01	5 L metal tank	-	01	-



Extreme Ultra White

Leak Stop for Refrigerators

- It has the same characteristics as Extreme Ultra.
- Specific for compressors of domestic and industrial refrigerators, wine cellars, vending machines, ice cream display cabinets, etc., operating with R600, R290 and R134a.

Dosage: 1 dose (6 mL - 0.2 fl oz) per 200 mL (6.7 fl oz) of compressor oil.**Cartridge:**

Art.-Nr.	Description	€	30	5400
TR1176.AL.01.S2	No adapters	-	30	5400
TR1176.AL.H4.S2	1/4 SAE	-	30	5400

Aerosol Can with Push&Fill System: Available in three different formats, each compatible with a specific refrigerant: R600, R290 or R134a.

Art.-Nr.	System	Description	€	25	5400
PF1185.Y.01.S2	R600	No adapters	-	25	5400
PF1185.Y.H4.S2	R600	1/4 SAE	-	25	5400
PF1186.Y.01.S2	R290	No adapters	-	25	5400
PF1186.Y.H4.S2	R290	1/4 SAE	-	25	5400
PF1187.Y.01.S2	R134a	No adapters	-	25	5400
PF1187.Y.H4.S2	R134a	1/4 SAE	-	25	5400

REFRIGERATOR ONLY

6 mL

**M.S.K INTERNATIONAL**

A Complete Solution for your Industrial Requirements



Alkaline Descalers

Organic residues and grease removal

- Alkaline inhibited descaler.
- Easily removes and prevents organic residues, grease, dirt, and corrosion.
- High degreasing power.
- Specific for cleaning heat exchangers of condensing boilers.
- Removes iron and limescale residues in the exchangers of boilers, including condensing and aluminium boilers, without corroding them.



- Heating system
- Steam boiler
- Underfloor heating system
- Water system



Art.-Nr.	Description	
TR1309.K.01	1 L Bottle	-
TR1309.P.01	10 L Tank	-
TR1309.D.01	25 L Tank	-
TR1309.T	210 L Tank	-

Acid Descalers

Encrustations, corrosion, oxidation removal from metal components

- Acid inhibited descaler.
- Easily removes and prevents limescale, pollutants, and carbonate encrustations.
- Removes rust and oxidation from metals, in particular steel, copper, cast iron.
- Do not use on aluminium or galvanized surfaces.
- Quickly removes lime or siliceous residues from pipes and closed circulation systems of boilers and heat exchangers.



- Water system
- Toilet tanks
- Heating system
- Condensing boilers



Art.-Nr.	Description	
TR1310.K.01	1 L Bottle	-
TR1310.P.01	10 L Tank	-
TR1310.D.01	25 L Tank	-
TR1310.T	210 L Tank	-



M.S.K INTERNATIONAL

A Complete Solution for your Industrial Requirments

DEALS IN : REFRIGERATION & AIR CONDITIONING CONTROLS & PARTS, REFRIGERANT GASES, MS PIPES, FITTINGS & VALVES

Exclusive Distributor for Errecom Products in Pakistan

HEAD OFFICE

Shop #8, Ground Floor Falak Corporate City,
Opposite Bolten Market Post Office Karachi, 74200.

☎ +9221 3241 7251 & 3241 7254

☎ +92 333 3095 852 & +92 321 0820 786

✉ msk_intl@hotmail.com

🌐 mskinternational.com.pk

