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# Vilter 717FG

## Ammonia Compressor Lubricant

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### Product Descriptions

Vilter 717FG is a high performance ammonia compressor lubricant based on severely hydrocracked, isodewaxed base oil. Vilter 717FG is formulated with an advanced additive system developed for effectiveness in an aggressive ammonia environment. This product displays excellent thermal, oxidative, and hydrolytic stability allowing for extended drain intervals. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required. VILTER 717FG provides very low foaming performance in ammonia systems. Furthermore, the product is formulated to meet 21 CFR 178.3570 incidental food contact requirements.

### Applications\*

- Reciprocating and rotary screw compressors
- Ammonia refrigeration applications
- Ammonia process gas applications

*\*To assure proper lubricant selection, please consult your Vilter representative.*

### Packaging

- 1 US Quarts
- 5 US Gallon
- 55 US Gallon
- Totes

### Product Features

- Chemical stability in the presence of ammonia
- low pour point
- Rust and corrosion protection
- Excellent thermal stability
- Low water content

### Potential Benefits

- Prevents sludge formation
- Increased evaporator efficiency
- Extended drain intervals
- Minimize oil leaks in older systems
- Maximum bearing, cooler and equipment life
- Minimal vapor phase oil carryover to downstream equipment
- Longer oil life
- Longer filter life
- Minimize maintenance costs

## Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	67.8	ASTM D-445
Viscosity cSt @ 100° C	8.83	ASTM D-445
Viscosity Index	102	ASTM D2270
Moisture, ppm	< 100	ASTM D-6304
Specific Gravity @ 60°F/15.6° C	0.867	ASTM D-7777
Density, lb/gal	7.20	ASTM D-7777
Flash Point, °F/°C	486/252	ASTM D-92
Pour Point, °F/°C	-27/-33	ASTM D-97

*Notice: Physical Properties are typical of those obtained with normal production tolerances and do not constitute specifications.*

## Health and Safety

Based on available information, Vilter 717FG is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the SDS.

# VILTER 717

## Ammonia Refrigeration Fluid

### Product Description

VILTER 717 is a high performance ammonia gas compressor lubricant based on severely hydrocracked, isodewaxed base oil. VILTER 717 is formulated with an advanced additive system developed for effectiveness in an aggressive ammonia environment. This product displays excellent thermal, oxidative, and hydrolytic stability allowing for extended drain intervals. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required. VILTER 717 provides very low foaming performance in ammonia systems.

### Applications\*

- Reciprocating and rotary screw compressors
- Ammonia refrigeration applications
- Ammonia process gas applications

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Chemical stability in presence of ammonia	Prevents sludge formation Increased evaporator efficiency in refrigeration systems Less "top up" oil needed Minimize maintenance cost Extended drain intervals
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment

	Longer oil life Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil return from evaporator Less wear at start up Ability to flow at low temperatures More protection at high operating temperatures

### Health and Safety

Based on available information, Vilter 717 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	68.2	ASTM D-445
Viscosity cSt @ 100° C	8.8	ASTM D-445
Viscosity Index	102	ASTM D2270
Acid Value, mg KOH/gm	<0.05	ASTM D-974
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.867	ASTM D-4052
Flash Point, °F/°C	473/245	ASTM D-92
Pour Point, °F/°C	-38/-39	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER B-68

## HFC Refrigeration Fluid

### Product Description

VILTER B-68 is a high performance HFC compressor lubricant based on synthetic polyol ester (POE). VILTER B-68 provides excellent miscibility and oil return from the evaporator to the compressor.

### Applications\*

- Reciprocating compressors
- Scroll compressors
- Rotary compressors
- Screw compressors
- Centrifugal compressors
- All HFC applications (including R-134a, R-404A, R-407C, R-410A, R-507)

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Miscibility with HFC Refrigerants	Better evaporator efficiency Excellent return from the evaporator
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Better oil return from evaporator Less wear at start up More protection at high operating temperatures

## Health and Safety

Based on available information, VILTER B-68 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	65.0	ASTM D-445
Viscosity cSt @ 100° C	8.3	ASTM D-445
Viscosity Index	96	ASTM D2270
Acid Value, mg KOH/gm	0.1Max	ASTM D-974 modified
Specific Gravity @ 60°F/15.6° C	0.966	ASTM D-4052
Density, lb/gal	8.05	ASTM D-4052
Flash Point, °F/°C	491/255	ASTM D-92
Fire Point, °F/°C	585/307	ASTM D-92
Pour Point, °F/°C	-40/-40	ASTM D-5950
Color	0.5 Max	ASTM D-1500
Low Temperature Miscibility Limit (10% Volume Lubricant in Refrigerant) R-134a (°F/°C)		Sealed Tube  <-31/<-35

R-404A

<-76/<-60

R-407C

<-31/<-35

R-410A

<-22/<-30

Notice: The product properties are typical of those obtained with normal production tolerances and do not constitute a specification. The information contained herein is subject to change without notification. Before using this product, please read its label and Safety Data Sheet.

# VILTER 6005-100

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER 6005-100 is a fully formulated polyalphaolefin (PAO) based synthetic high performance compressor lubricant. Its primary use is in hydrocarbon gas streams containing corrosive components. VILTER 6005-100 is formulated with advanced silicon containing corrosion inhibition additive system developed for extended corrosion protection in acidic environments. The product displays outstanding thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The low pour point and stable viscosity of the product increases effectiveness in applications where high and low temperature extremes are encountered.

### Applications\*

- Rotary screw compressors
- Rotary scroll compressors
- Hydrocarbon/natural gas compressors
- Vapor recovery units

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

### Features and Benefits

Feature	Potential Benefit
Extremely low water content	Maximum bearing life
Ashless formulation	Minimal solid formation for turbine feed applications
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range
Rust and corrosion protection	Maximum bearing, cooler and equipment life

Excellent thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
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## Health and Safety

Based on available information, VILTER 6005-100 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	100.0	ASTM D-445
Viscosity cSt @ 100° C	15.2	ASTM D-445
Viscosity Index	160	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.837	ASTM D-4052
Flash Point, °F/°C	530/277	ASTM D-92
Pour Point, °F/°C	-38/-39	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable.

# VILTER B-68AWAF

## POE Refrigeration Fluid

### Product Description

VILTER B-68AWAF is a high performance compressor lubricant based on synthetic polyol ester (POE). It is fully formulated with extreme-pressure and antiwear additives for excellent load carrying performance. VILTER B-68AWAF provides excellent miscibility and oil return from the evaporator to the compressor.

### Applications\*

- Reciprocating compressors
- Scroll compressors
- Rotary compressors
- Centrifugal Compressors
- All HFC Applications

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

## Features and Benefits

Feature	Potential Benefit
Miscibility with HFC Refrigerants	Better evaporator efficiency Excellent return from the evaporator
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Better oil return from evaporator Less wear at start up More protection at high operating temperatures

## Health and Safety

Based on available information, VILTER B-68AWAF is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	65.0	ASTM D-445
Viscosity cSt @ 100° C	8.3	ASTM D-445
Viscosity Index	96	ASTM D2270
Acid Value, mg KOH/gm	0.1Max	ASTM D-974 modified
Specific Gravity @ 60°F/15.6° C	0.966	ASTM D-4052
Density, lb/gal	8.05	ASTM D-4052
Flash Point, °F/°C	491/255	ASTM D-92
Pour Point, °F/°C	-40/-40	ASTM D-5950
Color	0.5 Max	ASTM D-1500
Low Temperature Miscibility Limit (10% Volume Lubricant in Refrigerant)		Sealed Tube
R-134a (°F/°C)	<-31/<-35	
R-404A	<-76/<-60	
R-407C	<-31/<-35	
R-410A	<-22/<-30	

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER B-32

## HFC Refrigeration Fluid

### Product Description

VILTER B-32 is a high performance HFC compressor lubricant based on synthetic polyol ester (POE). VILTER B-32 provides excellent miscibility and oil return from the evaporator to the compressor.

### Applications\*

- Reciprocating compressors
- Scroll compressors
- Rotary compressors
- Centrifugal compressors
- All HFC applications (including R-134a, R-404A, R-407C, R-410A)

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Miscibility with HFC Refrigerants	Better evaporator efficiency Excellent return from the evaporator
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Better oil return from evaporator Less wear at start up More protection at high operating temperatures

## Health and Safety

Based on available information, VILTER B-32 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	32.0	ASTM D-445
Viscosity cSt @ 100° C	5.6	ASTM D-445
Viscosity Index	115	ASTM D2270
Acid Value, mg KOH/gm	0.1 Max	ASTM D-974 modified
Specific Gravity @ 60°F/15.6° C	0.984	ASTM D-4052
Density, lb/gal	8.20	ASTM D-4052
Flash Point, °F/°C	482/250	ASTM D-92
Fire Point, °F/°C	565/296	ASTM D-92
Pour Point, °F/°C	-67/-55	ASTM D-5950
Color	0.5 Max	ASTM D-1500
Low Temperature Miscibility Limit (10% Volume Lubricant in Refrigerant)		Sealed Tube
R-134a (°F/°C)	<-58/<-50	
R-404A	<-76/<-60	
R-407C	<-31/<-35	
R-410A	<-49/<-45	

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER CO<sub>2</sub> GAS

## CO<sub>2</sub> Food Grade Compressor Lubricant

### Product Description

VILTER CO<sub>2</sub> GAS is a high performance, fully formulated polyalphaolefin (PAO) based synthetic CO<sub>2</sub> compressor lubricant. VILTER CO<sub>2</sub> GAS is ashless and is formulated with an advanced additive system to prevent corrosion in acidic environments where carbonic acid, H<sub>2</sub>S and water are present. The product displays outstanding thermal, oxidative, and hydrolytic stability in demanding applications that require extended drain intervals and performance. The low pour point and stable viscosity of the product increases effectiveness in applications where high and low temperature extremes are encountered. The product is formulated to meet 21 CFR 178.3570 incidental food contact requirements and is NSF approved.

### Applications\*

- Rotary screw compressors
- Reciprocating compressors
- Carbon dioxide process and refrigeration compressors
- Carbon monoxide compressors
- Gas streams containing moisture, CO<sub>2</sub>, CO and/or H<sub>2</sub>S

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

## Features and Benefits

Feature	Potential Benefit
Rust and corrosion protection	Maximum bearing, cooler and equipment life
Extremely low water content	Maximum bearing life
Ashless formulation	Minimal solid formation
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range Easy return from evaporator in CO2 refrigeration systems
Excellent thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs

## Health and Safety

Based on available information, VILTER CO<sub>2</sub> GAS is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	64.9	ASTM D-445
Viscosity cSt @ 100° C	9.7	ASTM D-445
Viscosity Index	133	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.836	ASTM D-4052
Density, lb/gal	6.97	
Flash Point, °F/°C	518/270	ASTM D-92
Pour Point, °F/°C	-60/-51	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same

# COMPRESSOR VILTER B-68AWAF

## HFC Refrigeration Fluid

### Product Description

COMPRESSOR VILTER B-68AWAF is a high performance HFC compressor lubricant based on synthetic polyol ester (POE). It is fully formulated with extreme-pressure and antiwear additives for excellent load carrying performance.

COMPRESSOR VILTER B-68AWAF provides excellent miscibility and oil return from the evaporator to the compressor.

### Applications\*

- Reciprocating compressors
- Scroll compressors
- Rotary compressors
- All HFC applications (including R-134a, R-404A, R-407C, R-410A, R-507)

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Miscibility with HFC Refrigerants	Better evaporator efficiency Excellent return from the evaporator
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Better oil return from evaporator

	Less wear at start up More protection at high operating temperatures
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## Health and Safety

Based on available information, COMPRESSOR VILTER B-68AWAF is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	65.0	ASTM D-445
Viscosity cSt @ 100° C	8.3	ASTM D-445
Viscosity Index	96	ASTM D2270
Acid Value, mg KOH/gm	0.1Max	ASTM D-974 modified
Specific Gravity @ 60°F/15.6° C	0.966	ASTM D-4052
Density, lb/gal	8.05	ASTM D-4052
Flash Point, °F/°C	491/255	ASTM D-92
Pour Point, °F/°C	-40/-40	ASTM D-5950
Color	0.5 Max	ASTM D-1500
Low Temperature Miscibility Limit (10% Volume Lubricant in Refrigerant)		Sealed Tube
R-134a (°F/°C)		<-31/<-35

R-404A

<-76/<-60

R-407C

<-31/<-35

R-410A

<-22/<-30

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# COMPRESSOR VILTER B-100AWAF

## HFC Refrigeration Fluid

### Product Description

COMPRESSOR VILTER B- 100AWAF is a high performance HFC compressor lubricant based on synthetic polyol ester (POE). It is fully formulated with extreme-pressure and antiwear additives for excellent load carrying performance. COMPRESSOR VILTER B-100AWAF provides excellent miscibility and oil return from the evaporator to the compressor.

### Applications\*

- Reciprocating compressors
- Scroll compressors
- Rotary compressors
- All HFC applications (including R-134a, R-404A, R-407C, R-410A, R-507)

\* To assure proper lubricant selection, please consult your Vilter representative

### Features and Benefits

Feature	Potential Benefit
Miscibility with HFC Refrigerants	Better evaporator efficiency Excellent return from the evaporator
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Better oil return from evaporator

	Less wear at start up More protection at high operating temperatures
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## Health and Safety

Based on available information, VILTER B-100AWAF is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	100	ASTM D-445
Viscosity cSt @ 100° C	10.9	ASTM D-445
Viscosity Index	93	ASTM D2270
Acid Value, mg KOH/gm	0.1Max	ASTM D-974 modified
Specific Gravity @ 60°F/15.6° C	0.966	ASTM D-4052
Density, lb/gal	8.05	ASTM D-4052
Flash Point, °F/°C	518/270	ASTM D-92
Pour Point, °F/°C	-31/-35	ASTM D-5950
Color	0.5 Max	ASTM D-1500

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER D

## Refrigeration Lubricant

### **Product Description**

VILTER D is a high performance refrigeration compressor lubricant based on a premium naphthenic mineral oil. The excellent stability and low temperature properties make this product ideal for a wide variety of refrigeration applications. VILTER D is wax free which prevents solid formation in the evaporator and expansion valve.

### **Applications\***

- R-22
- R-123
- R 414A

\* To assure proper lubricant selection, please consult your Vilter Manufacturing

### **Health and Safety**

Based on available information, VILTER D is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity, cSt @ 40° C	61.4	ASTM D-445
Viscosity, cSt @ 100°C	6.55	ASTM D-445
Viscosity Index	28	ASTM D2270
Flash Point, °F/°C	365/185	ASTM D-92
Pour Point, °F/°C	-33/-36	ASTM D-5950
Specific Gravity @ 77°F/25° C	0.916	ASTM D-4052
Density, lb/gal	7.63	ASTM D-4052
Color	0.5	ASTM D-1500
Aniline Point, °F/°C	181/93	ASTM D611
Floc Point, °F/°C	-59/-50	ASHRAE 86

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER F-68

## Refrigeration Fluid

### Product Description

VILTER F-68 is a high performance compressor lubricant based on a blend of synthetic alkyl benzene and wax free naphthenic mineral oil. VILTER F-68 is completely compatible with refrigerant gases including halogenated refrigerants. This product displays excellent thermal and hydrolytic stability allowing for extended drain intervals. The low pour point makes the product very effective in applications where temperature extremes are required. VILTER F-68 provides very low foaming performance in refrigeration systems.

### Typical Applications\*

- SUVA™ products MP39, MP66, HP80, and HP81
- R-22
- R-123
- R-502

\* To assure proper lubricant selection, please consult your Vilter Manufacturing

### Features and Benefits

Feature	Potential Benefit
Excellent lubricity	Longer bearing life Reduced maintenance costs
Very low pour point	Better evaporator efficiency No waxy solid formation
Chemical stability	Reduced sludge formation Increased evaporator efficiency in refrigeration systems Less “top up” oil needed

	Minimize maintenance cost Extended drain intervals
Very good thermal stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
High viscosity index	Less wear at start up More protection at high operating temperatures

### Health and Safety

Based on available information, VILTER F-68 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	54.2	ASTM D-445
Viscosity cSt @ 100° C	6.3	ASTM D-445
Viscosity Index	37	ASTM D2270
Specific Gravity @ 59°F/15° C	0.89	ASTM D-1298
Density, lb/gal	7.41	ASTM D-1298
Flash Point, °F/°C	379/193	ASTM D-92
Pour Point, °F/°C	-38/-39	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# Vilter HCL-68

## PAO Refrigeration Fluid

### Product Description

VILTER HCL-68 is a high performance compressor lubricant based on synthetic PAO. VILTER HCL-68 is formulated and developed for effectiveness in an aggressive ammonia environment. This product displays excellent thermal and hydrolytic stability allowing for extended drain intervals. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required. VILTER HCL-68 provides very low foaming performance in refrigeration systems.

### Applications\*

- Reciprocating and rotary screw compressors
- Ammonia refrigeration applications

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Very low pour point	Better evaporator efficiency No waxy solid formation in temperatures as low as -46°C
Chemical stability	Prevents sludge formation Increased evaporator efficiency in refrigeration systems Less "top up" oil needed Minimize maintenance cost Extended drain intervals
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life

	Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index	Better oil return from evaporator Less wear at start up More protection at high operating temperatures

### Health and Safety

Based on available information, VILTER HCL-68 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	65.8	ASTM D-445
Viscosity cSt @ 100° C	10.3	ASTM D-445
Viscosity Index	143	ASTM D2270
Specific Gravity @ 60°F/15.6° C	0.836	ASTM D-4052
Density, lb/gal	6.96	
Flash Point, °F/°C	505/263	ASTM D-92
Pour Point, °F/°C	-60/-51	ASTM D-97

# VILTER HCL68FG

## Food Grade PAO Ammonia Refrigeration Fluid

### Product Description

VILTER HCL68FG is a high performance compressor lubricant based on synthetic PAO. VILTER HCL68FG is formulated with an advanced additive system developed for effectiveness in an aggressive ammonia environment and includes a seal conditioning additive to prevent seal leakage in older systems being converted to this lubricant. This product displays excellent thermal and hydrolytic stability allowing for extended drain intervals. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required. VILTER HCL68FG provides very low foaming performance in refrigeration systems. The product is formulated to meet 21 CFR 178.3570 incidental food contact requirements (H1).

### Applications\*

- Reciprocating and rotary screw compressors
- Ammonia refrigeration applications

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

## Features and Benefits

Feature	Potential Benefit
Very low pour point	Better evaporator efficiency No waxy solid formation in temperatures as low as -46°C
Seal conditioning formulation	Minimize oil leaks in older systems converted to this product
Chemical stability	Prevents sludge formation Increased evaporator efficiency in refrigeration systems Less "top up" oil needed Minimize maintenance cost Extended drain intervals
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index	Better oil return from evaporator Less wear at start up More protection at high operating temperatures

## Health and Safety

Based on available information, VILTER HCL68FG is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	65.8	ASTM D-445
Viscosity cSt @ 100° C	10.3	ASTM D-445
Viscosity Index	143	ASTM D2270
Specific Gravity @ 60°F/15.6° C	0.836	ASTM D-4052
Density, lb/gal	6.96	
Flash Point, °F/°C	505/263	ASTM D-92
Pour Point, °F/°C	-65/-54	ASTM D-97

*Notice: Physical Properties are typical of those obtained with normal production tolerances and do not constitute specifications.*

# VILTER METHANE 68

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER METHANE 68 is a high performance hydrocarbon/chemical process gas compressor lubricant based on severely hydrocracked, iso-dewaxed base oil.

VILTER METHANE 68 is formulated with an advanced silicon containing corrosion inhibition additive system developed for extended corrosion protection in acidic environments. The product displays excellent thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required.

### Applications\*

- Reciprocating and rotary screw compressors
- Gas gathering compressors
- Low specific gravity refinery gas applications
- Digester gas
- Chemical process gas applications
- Sour gas compression

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Excellent rust and corrosion protection	Maximum bearing and equipment life
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment

	Longer oil life Longer filter life Minimize maintenance costs
Excellent lubricity	Reduced wear of cylinders, bearings, rings and gears
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil flow and less wear at start up Ability to start at low ambient temperatures More protection and high operating temperatures

### Health and Safety

Based on available information, VILTER METHANE 68 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	68.2	ASTM D-445
Viscosity cSt @ 100° C	8.8	ASTM D-445
Viscosity Index	102	ASTM D2270
Specific Gravity @ 60°F/15.6° C	0.867	ASTM D-4052
Density	7.23	ASTM D-4052
Flash Point, °F/°C	473/245	ASTM D-92
Pour Point, °F/°C	-33/-36	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER METHANE PAO-68

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER METHANE PAO-68 is a fully formulated polyalphaolefin (PAO) based synthetic high performance compressor lubricant. Its primary use is in hydrocarbon gas streams containing corrosive components. VILTER METHANE PAO-68 is ashless and is formulated with an advanced additive system to prevent corrosion and won't foul turbine feed gas nozzles. The product displays outstanding thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The low pour point and stable viscosity of the product increases effectiveness in applications where high and low temperature extremes are encountered.

### Applications\*

- Rotary screw compressors
- Hydrocarbon/natural gas compressors
- Landfill gas compressors
- Turbine feed gas compressors

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

### Features and Benefits

Feature	Potential Benefit
Extremely low water content	Maximum bearing life
Ashless formulation	Minimal solid formation for turbine feed applications
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range

Rust and corrosion protection	Maximum bearing, cooler and equipment life
Excellent thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs

### Health and Safety

Based on available information, VILTER METHANE PAO-68 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	63.8	ASTM D-445
Viscosity cSt @ 100° C	9.6	ASTM D-445
Viscosity Index	133	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.855	ASTM D-4052
Flash Point, °F/°C	527/275	ASTM D-92
Pour Point, °F/°C	-55/-48	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER METHANE PAO-100

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER METHANE PAO-100 is a fully formulated polyalphaolefin (PAO) based synthetic high performance compressor lubricant. Its primary use is in hydrocarbon gas streams containing corrosive components. VILTER METHANE PAO-100 is ashless and is formulated with an advanced additive system to prevent corrosion and won't foul turbine feed gas nozzles. The product displays outstanding thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The low pour point and stable viscosity of the product increases effectiveness in applications where high and low temperature extremes are encountered.

### Applications\*

- Rotary screw compressors
- Hydrocarbon/natural gas compressors
- Landfill gas compressors
- Turbine feed gas compressors

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

### Features and Benefits

Feature	Potential Benefit
Extremely low water content	Maximum bearing life
Ashless formulation	Minimal solid formation for turbine feed applications
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range
Rust and corrosion protection	Maximum bearing, cooler and equipment life

Excellent thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
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## Health and Safety

Based on available information, VILTER METHANE PAO-100 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	100.0	ASTM D-445
Viscosity cSt @ 100° C	13.4	ASTM D-445
Viscosity Index	134	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.84	ASTM D-4052
Flash Point, °F/°C	527/275	ASTM D-92
Pour Point, °F/°C	-40/-40	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER METHANE

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER METHANE is a high performance hydrocarbon/chemical process gas compressor lubricant based on severely hydrocracked, isodewaxed base oil. VILTER METHANE is formulated with an advanced silicon containing corrosion inhibition additive system developed for extended corrosion protection in acidic environments. The product displays excellent thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required.

### Applications\*

- Reciprocating and rotary screw compressors
- Gas gathering compressors
- Low specific gravity refinery gas applications
- Digester gas
- Chemical process gas applications
- Sour gas compression

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

## Features and Benefits

Feature	Potential Benefit
Excellent rust and corrosion protection	Maximum bearing and equipment life
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
Excellent lubricity	Reduced wear of cylinders, bearings, rings and gears
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil flow and less wear at start up Ability to start at low ambient temperatures More protection and high operating temperatures

## Health and Safety

Based on available information, VILTER METHANE is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	103.4	ASTM D-445
Viscosity cSt @ 100° C	11.7	ASTM D-445
Viscosity Index	102	ASTM D2270
Acid Value, mg KOH/gm	<0.05	ASTM D-974
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.879	ASTM D-4052
Flash Point, °F/°C	510/265	ASTM D-92
Pour Point, °F/°C	-27/-33	ASTM D-97

# **VILTER NATURAL GAS 150**

## **Hydrocarbon Gas Compressor Lubricant**

### **Product Description**

VILTER NATURAL GAS 150 is a high performance hydrocarbon gas gathering compressor lubricant based on severely hydrocracked, iso-dewaxed base oil. VILTER NATURAL GAS 150 is formulated with an advanced additive system suited for acidic environments. The product displays excellent thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required.

### **Applications\***

- Rotary screw compressors
- Low specific gravity gas gathering/refiner compressors
- Natural gas

\* To assure proper lubricant selection, please consult your Vilter Manufacturing's representative.

## Features and Benefits

Feature	Potential Benefit
Very good rust and corrosion protection	Maximum bearing and equipment life
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil flow and less wear at start up Ability to start at low ambient temperatures More protection and high operating temperatures

## Health and Safety

Based on available information, VILTER NATURAL GAS 150 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	148.3	ASTM D-445
Viscosity cSt @ 100° C	14.9	ASTM D-445
Viscosity Index	101	ASTM D2270
Acid Value, mg KOH/gm	<0.05	ASTM D-974
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.866	ASTM D-4052
Density	7.23	ASTM D-4052
Flash Point, °F/°C	516/269	ASTM D-92
Pour Point, °F/°C	-27/-33	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# **VILTER NATURAL GAS**

## **Hydrocarbon Gas Compressor Lubricant**

### **Product Description**

VILTER NATURAL GAS is a high performance hydrocarbon gas gathering compressor lubricant based on severely hydrocracked, iso-dewaxed base oil. VILTER NATURAL GAS is formulated with an advanced additive system suited for acidic environments. The product displays excellent thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required.

### **Applications\***

- Rotary screw compressors
- Low specific gravity gas gathering/refiner compressors
- Natural gas

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

## Features and Benefits

Feature	Potential Benefit
Very good rust and corrosion protection	Maximum bearing and equipment life
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil flow and less wear at start up Ability to start at low ambient temperatures More protection and high operating temperatures

## Health and Safety

Based on available information, VILTER NATURAL GAS is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	102.4	ASTM D-445
Viscosity cSt @ 100° C	11.5	ASTM D-445
Viscosity Index	100	ASTM D2270
Acid Value, mg KOH/gm	<0.05	ASTM D-974
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.875	ASTM D-4052
Density	7.29	
Flash Point, °F/°C	500/260	ASTM D-92
Pour Point, °F/°C	-27/-33	ASTM D-97

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# VILTER NH<sub>3</sub>-100-Cl

## Refrigeration Fluid

### Product Description

VILTER NH<sub>3</sub>-100-Cl is a high performance compressor lubricant based on severely hydrocracked, isodewaxed base oil. VILTER NH<sub>3</sub>-100-Cl is formulated with an advanced additive system developed for effectiveness in aggressive environments. This product displays excellent thermal, oxidative, and hydrolytic stability allowing for extended drain intervals. The product contains additives to provide corrosion protection in systems that may contain moisture. The stable viscosity and low pour point make the product very effective in applications where temperature extremes are required. VILTER NH<sub>3</sub>-100-Cl provides very low foaming performance in ammonia systems.

### Applications\*

- Centrifugal, reciprocating and rotary screw compressors
- Ammonia applications with moisture present

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative

### Features and Benefits

Feature	Potential Benefit
Chemical stability in presence of ammonia	Prevents sludge formation Increased evaporator efficiency in refrigeration systems Less "top up" oil needed Minimize maintenance cost Extended drain intervals
Corrosion protection	Maximum bearing and equipment life Minimize maintenance costs
Very good thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life

	Longer filter life Minimize maintenance costs
Low dissolved water content	Maximum bearing and equipment life Better gas/oil separation in coalescing filters Decreases potential of emulsions
High viscosity index and low pour point	Better oil return from evaporator Less wear at start up Ability to flow at low temperatures More protection at high operating temperatures

## Health and Safety

Based on available information, VILTER NH<sub>3</sub>-100-Clis a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	102.4	ASTM D-445
Viscosity cSt @ 100° C	11.5	ASTM D-445
Viscosity Index	100	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.875	ASTM D-4052
Density, lb/gal	7.29	ASTM D-4052
Flash Point, °F/°C	500/260	ASTM D-92
	-27/-33	Pour Point, ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER POE-100

## Air Compressor Lubricant

### Product Description

VILTER POE-100 is a fully formulated multifunctional ester synthetic high performance compressor lubricant. Its primary use is in high temperature and high pressure air compression applications. VILTER POE-100 is ashless and is formulated with an advanced additive system to prevent corrosion and oxidation at elevated temperatures. The product displays outstanding thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. VILTER POE-100 is completely demulsible, has a low pour point and stable viscosity to increase effectiveness in applications where high and low temperature extremes are encountered.

### Applications\*

- Rotary screw air compressors
- Vane Vacuum pumps
- Reciprocating compressors

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

### Features and Benefits

Feature	Potential Benefit
Extremely Low Volatility	Low vapor phase carry over Minimizes solid formation
Ashless formulation	Minimal solid formation
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range
Rust and corrosion protection	Maximum bearing, cooler and equipment life

Excellent thermal and oxidative stability	No varnish/solid formation Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
Completely demulsible	Good separation in gravity type oil/water separators

### Health and Safety

Based on available information, VILTER POE-100 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

### Typical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	100.0	ASTM D-445
Viscosity cSt @ 100° C	10.9	ASTM D-445
Viscosity Index	93	ASTM D2270
Acid Value, mg KOH/gm	0.1Max	ASTM D-974 modified
Moisture, ppm	< 250 Max	ASTM D-1533
Specific Gravity @ 60°F/15.6° C	0.966	ASTM D-4052
Density, lb/gal	8.05	ASTM D-4052
Flash Point, °F/°C	518/270	ASTM D-92
Pour Point, °F/°C	-31/-35	ASTM D-5950

Notice: The information and statements above are based on information we believe to be reliable; however, we expressly do not represent, warrant or guarantee the accuracy, completeness, or reliability of the same.

# VILTER XG 105-100

## Hydrocarbon Gas Compressor Lubricant

### Product Description

VILTER XG 105-100 is a fully formulated polyalphaolefin (PAO) based synthetic high performance compressor lubricant. Its primary use is in hydrocarbon gas streams containing corrosive components. VILTER XG 105-100 is formulated with advanced silicon containing corrosion inhibition additive system developed for extended corrosion protection in acidic environments. The product displays outstanding thermal, oxidative, and hydrolytic stability in applications that require extended drain intervals and performance. The low pour point and stable viscosity of the product increases effectiveness in applications where high and low temperature extremes are encountered.

### Applications\*

- Rotary screw compressors
- Rotary scroll compressors
- Hydrocarbon/natural gas compressors
- Vapor recovery units

\* To assure proper lubricant selection, please consult your Vilter Manufacturing representative.

### Features and Benefits

Feature	Potential Benefit
Extremely low water content	Maximum bearing life
Ashless formulation	Minimal solid formation for turbine feed applications
High viscosity index and low pour point	Better oil flow and less wear at start up Wide operating temperature range
Rust and corrosion protection	Maximum bearing, cooler and equipment life

Excellent thermal and oxidative stability	Minimal vapor phase oil carryover to downstream equipment Longer oil life Longer filter life Minimize maintenance costs
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## Health and Safety

Based on available information, VILTER XG 105-100 is a non-toxic, non-hazardous product that is not expected to cause any adverse health effects when used as designed. Users are advised to follow the recommendations provided in the MSDS.

## Physical Properties

Criteria	Value	Method
Viscosity cSt @ 40° C	100.0	ASTM D-445
Viscosity cSt @ 100° C	15.2	ASTM D-445
Viscosity Index	160	ASTM D2270
Moisture, ppm	<50	ASTM D-1744
Specific Gravity @ 60°F/15.6° C	0.837	ASTM D-4052
Flash Point, °F/°C	530/277	ASTM D-92
Pour Point, °F/°C	-38/-39	ASTM D-97

Notice: The information and statements above are based on information we believe to be reliable.