

MATERIAL SAFETY DATA SHEET (In accordance with Regulations (EC) no. 453/2010)

Compressor Lubricant CL 1000 PHLA-3

Date: January 2016
S.REACH

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Product name	Compressor Lubricant CL 1000 PHLA-3
Chemical Name	White Mineral Oil + additives
Other means of identification	Not applicable
CAS number	Blend, not reportable
EC number	Not applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Category Consumer	Applied in primary, booster and hyper compressors in LDPE plants world-wide
Sectors of Use	SU3 Industrial uses: Uses of substances as such or in preparations* at industrial sites
Relevant identified uses	A family of high performance lubricants that consist of white mineral oil, viscosity improvers and lubricity packages, designed to lubricate under extreme conditions of pressure, temp. and in the presence of supercritical ethylene gas
Uses advised against	Not Applicable

1.3. Details of the supplier of the safety data sheet

Registered company name	Sonneborn Refined Products B.V.
Address	Mainhavenweg 6, 1043 AL Amsterdam / The Netherlands
Telephone	+31-20-6117475
Fax	+31-20-6111170
Website	www.sonneborn.com
Email	QEHS@Sonneborn.com

1.4. Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	+31-20-6117475
Other emergency telephone numbers	Not Available

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SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not considered a dangerous mixture according to directive 1999/45/EC, Reg. (EC) No 1272/2008 (if applicable) and their amendments. Not classified as Dangerous Goods for transport purposes.

Classification according to regulation (EC) No 1272/2008 [CLP] ^[1]	Not classified
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2.2. Label elements

CLP label elements	Not classified
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SIGNAL WORD	None
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Hazard statement(s)

Supplementary statement(s)

2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

See 'Composition on ingredients' in Section 3.2

3.2. Mixtures

1.CAS No 2.EC No 3.Index No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP]
Not applicable			

Legend: 1. Classified by Chemwatch; 2. Classification drawn from EC Directive 67/548/EEC - Annex I; 3. Classification drawn from EC Directive 1272/2008 - Annex VI 4. Classification drawn from C&L

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	<p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

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Ingestion

- ▶ Immediately give a glass of water.
- ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

5.1. Extinguishing media

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.
- ▶ Water spray or fog - Large fires only.

5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility

- ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

5.3. Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear full body protective clothing with breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

See section 8

6.2. Environmental precautions

See section 12

6.3. Methods and material for containment and cleaning up

Minor Spills

- ▶ Remove all ignition sources.
- ▶ Clean up all spills immediately.
- ▶ Avoid breathing vapours and contact with skin and eyes.
- ▶ Control personal contact with the substance, by using protective equipment.
- ▶ Contain and absorb spill with sand, earth, inert material or vermiculite.
- ▶ Wipe up.
- ▶ Place in a suitable, labeled container for waste disposal.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling

- ▶ Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- ▶ Prevent concentration in hollows and sumps.
- ▶ **DO NOT enter confined spaces until atmosphere has been checked.**
- ▶ Avoid smoking, naked lights or ignition sources.
- ▶ Avoid contact with incompatible materials.
- ▶ When handling, **DO NOT eat, drink or smoke.**
- ▶ Keep containers securely sealed when not in use.

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	<ul style="list-style-type: none"> ‡ Avoid physical damage to containers. ‡ Always wash hands with soap and water after handling. ‡ Work clothes should be laundered separately. ‡ Use good occupational work practice. ‡ Observe manufacturer's storage and handling recommendations contained within this MSDS. ‡ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
Fire and explosion protection	See section 5

7.2. Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ‡ Metal can or drum ‡ Packaging as recommended by manufacturer. ‡ Check all containers are clearly labeled and free from leaks.
Storage incompatibility	<ul style="list-style-type: none"> ‡ Avoid reaction with oxidizing agents

7.3. Specific end use(s)

See section 1.2


SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Control parameters****DERIVED NO EFFECT LEVEL (DNEL)**

Not Available

PREDICTED NO EFFECT LEVEL (PNEC)

Not Available

OCCUPATIONAL EXPOSURE LIMITS (OEL)**8.2. Exposure controls**

8.2.1. Appropriate engineering controls	
8.2.2. Personal protection	
Eye and face protection	<ul style="list-style-type: none"> ‡ Safety glasses with side shields ‡ Chemical goggles.
Skin protection	See Hand protection below
Hands/feet protection	Wear general protective gloves, eg. light weight rubber gloves.
Body protection	See Other protection below
Other protection	<p>No special equipment needed when handling small quantities.</p> <p>OTHERWISE:</p> <ul style="list-style-type: none"> ‡ Overalls. ‡ Barrier cream. ‡ Eyewash unit.
Thermal hazards	Not Available

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

8.2.3. Environmental exposure controls

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See section 12

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Colorless, transparent, oily liquid		
Physical state	Liquid	Density, kg/m³ at 20°C	810 - 890 ASTM D 1298
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	20 - 230 at 40°C - ASTM D 445
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Available
Flash point (°C)	> 200°C - ASTM D 92	Taste	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	<0.1	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available

9.2. Other information

	Not Available
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SECTION 10 STABILITY AND REACTIVITY

10.1.Reactivity	See section 7.2
10.2.Chemical stability	Product is considered stable and hazardous polymerization will not occur.
10.3. Possibility of hazardous reactions	See section 7.2
10.4. Conditions to avoid	See section 7.2
10.5. Incompatible materials	See section 7.2
10.6. Hazardous decomposition products	See section 5.3

SECTION 11 TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs.
Ingestion	The material has NOT been classified by EC Directives or other classification systems as 'harmful by ingestion'.
Skin Contact	The material is unlikely to produce an irritant dermatitis as described in EC Directives .
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

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white mineral oil (petroleum)	TOXICITY	IRRITATION
	Not Available	Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

white mineral oil (petroleum)	<u>Acute Toxicity</u>			
	Oral	LD50 > 5000mg/kg bw	rat	OECD Guideline 401
	Inhalation	LD50 > 5000mg/kg (4h)	rat	OECD guideline 403
	Dermal	LD50 > 2000mg/kg bw	rabbit	OECD Guideline 402
	<u>Skin irritation / corrosion</u>			
	Dermal	not irritating (24 and 72 h)	rabbit	OECD Guideline 404
	<u>Eye irritation</u>			
	Eye	not irritating (24 and 72 h)	rabbit	OECD Guideline 405
	<u>Sensitisation</u>			
	Skin	not sensitising (24 and 72 h)	guinea pig	OECD Guideline 406
	<u>Chronical Toxicity (STOT)</u>			
	single exposure	Not Available		
	repeated exposure	Not Available		
	<u>Genetic</u>			
	in Vitro	not found to be toxic	Ames test	OECD Guideline 471
	<u>Carcinogenicity</u>			
	Dermal	not carcinogenic.	mouse	OECD Guideline 453
<u>Toxicity to reproduction</u>				
Oral	NOAEL > 2000 mg/kg/day	rat	OECD Guideline 415	

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

12.3. Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

12.4. Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

12.5. Results of PBT and vPvB assessment: does not contain any PBT or vPvB substances

12.6. Other adverse effects

No data available

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SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product / Packaging disposal	<p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.</p> <p>A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> ▸ Reduction ▸ Reuse ▸ Recycling ▸ Disposal (if all else fails) <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</p>
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SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
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Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code : Not applicable

SECTION 15 REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : 67/548/EEC, 1999/45/EC, 98/24/EC, 92/85/EC, 94/33/EC, 91/689/EEC, 1999/13/EC, Commission Regulation (EU) 2015/830, Regulation (EC) No 1272/2008 and their amendments as well as the following British legislation: - The Control of Substances Hazardous to Health Regulations (COSHH) 2002 - COSHH Essentials - The Management of Health and Safety at Work Regulations 1999

15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (white mineral oil (petroleum))
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (white mineral oil (petroleum))
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y

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USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION**Full text Risk and Hazard codes****Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro-organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices