

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : Polarshine 12

1.2. Recommended use and restrictions on use

Recommended use : Polishing agent

1.3. Supplier

Manufacturer: Mirka Ltd
Pensalavägen 210, 66850 Jeppo, Finland
Telephone: +358 20 760 2111
E-mail: sales@mirka.com

Suppliers: Mirka Canada Inc.
2755 Boulevard Pitfield
Saint Laurent
Quebec, H4S 1T2
Canada
Telephone: +1 855 234 6385

Mirka USA Inc.
2375 Edison Blvd.
Twinsburg, Ohio 44087
USA
Telephone: +1 330 963 6421

1.4. Emergency telephone number

Emergency number : For Chemical Emergency: spill, leak, fire, exposure or accident call CHEMTREC day or night:

Within USA and Canada: +1 800 424 9300

Outside USA and Canada: +1 703 527 3887 (collect calls accepted)

Multilingual response for emergency calls only. Non-emergency calls cannot be serviced at these numbers.

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids Category 4	H227	Combustible liquid
Hazardous to the aquatic environment - Acute Hazard Category 2	H401	Toxic to aquatic life
Hazardous to the aquatic environment - Chronic Hazard Category 3	H412	Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labeling

Signal word (GHS CA) : Warning

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Hazard statements (GHS CA)	: H227 - Combustible liquid H401 - Toxic to aquatic life H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS CA)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves. P370+P378 - In case of fire: Use foam, Dry powder, Water spray, carbon dioxide (CO2) to extinguish. P403 - Store in a well-ventilated place. P501 - Dispose of contents/container to an authorized waste collection point.

2.3. Other hazards

Other hazards which do not result in classification : May degrease the skin. Repeated exposure may cause skin dryness or cracking. Dried out product can release dust. High concentrations of dust may cause respiratory irritation.

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Aluminum oxide	-	CAS-No.: 1344-28-1	10 – 20	Not classified
White mineral oil (petroleum)	-	CAS-No.: 8042-47-5	10 – 20	Asp. Tox. 1, H304
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	-	CAS-No.: 90622-58-5	5 - 10	Flam. Liq. 4, H227 Asp. Tox. 1, H304
(Z)-Octadec-9-enylamine, ethoxylated	-	CAS-No.: 26635-93-8	0.1 – < 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Magnesium oxide	-	CAS-No.: 1309-48-4	0.1 – < 1	Not classified
Potassium hydroxide	Potassium hydroxide	CAS-No.: 1310-58-3	< 0.1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop, obtain medical attention.

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Do not give an unconscious person anything to drink. If symptoms develop, obtain medical attention.
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Repeated exposure may cause skin dryness or cracking. May degrease the skin. Dried out product can release dust. High concentrations of dust may cause respiratory irritation.
---	--

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Treat symptomatically.
-----------------------------------	--------------------------

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Water spray. Carbon dioxide.
------------------------------	--

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	: Do not use water jet.
--------------------------------	-------------------------

5.3. Specific hazards arising from the hazardous product

Fire hazard	: Combustible liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.
Explosion hazard	: On heating : May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire	: Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Move containers from fire area if you can do it without risk. Use water spray or fog for cooling exposed containers. Do not allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting	: As in any fire, wear self-contained breathing apparatus and full protective gear.
Precautionary measures fire	: Keep upwind. Do not breathe fumes from fires or vapors from decomposition. Exercise caution when fighting any chemical fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Use personal protective equipment as required. See Section 8. Avoid inhalation of dust from dried product. Remove all sources of ignition. Ventilate area. Avoid inhalation of vapors. Avoid contact with skin and eyes. Evacuate unnecessary personnel. Do not allow to enter drains or water courses. Notify authorities if product enters sewers or public waters.
------------------	---

6.2. Methods and materials for containment and cleaning up

For containment	: Stop leak, if possible without risk. Dam up the liquid spill.
Methods for cleaning up	: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Dispose in a safe manner in accordance with local/national regulations. Wash spill area with soapy water.
Other information	: Caution : this product can cause the floor to be slippery.

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. The vapor is heavier than air, spreads along the ground and distant ignition is possible. Provide good ventilation in process area to prevent formation of vapor. Use solvent resistant equipment. Avoid contact with skin and eyes. Avoid inhalation of vapors. Avoid inhalation of dust from dried product.
Hygiene measures	: Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Floors should be impervious, resistant to liquids and easy to clean. Do not allow material to contaminate ground water system. Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container tightly closed. Protect against frost. Do not allow product to dry out.
Incompatible materials	: Oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium hydroxide (1310-58-3)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Notations and remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 150/2020)
Canada (Quebec) - Occupational Exposure Limits	
Local name	Potassium hydroxide
Plafond (OEL Ceiling)	2 mg/m ³
Notations and remarks	RP, EM
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Potassium hydroxide (1310-58-3)	
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Notations and remarks	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Notations and remarks	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Notations and remarks	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH
Canada (Nunavut) - Occupational Exposure Limits	
OEL C	2 mg/m ³
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
OEL C	2 mg/m ³
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL C	2 mg/m ³
Notations and remarks	TLV® Basis: URT, eye, & skin irr
Regulatory reference	ACGIH
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³
OEL STEL	2 mg/m ³
OEL C	2 mg/m ³
Regulatory reference	The Occupational Health and Safety Regulations, 1996. Chapter O-1.1 Reg 1
USA - ACGIH - Occupational Exposure Limits	
Local name	Potassium hydroxide

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Potassium hydroxide (1310-58-3)	
ACGIH OEL Ceiling	2 mg/m ³
Remark (ACGIH)	URT, eye, & skin irr
Regulatory reference	ACGIH 2021
White mineral oil (petroleum) (8042-47-5)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Oil mist, mineral
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 150/2020)
Canada (Quebec) - Occupational Exposure Limits	
Local name	Mineral oil (mist) (Oil mist, mineral)
VECD (OEL STEL)	10 mg/m ³
VEMP (OEL TWA)	5 mg/m ³
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Oil mist - mineral
OEL TWA	0.2 mg/m ³ mildly refined 1 mg/m ³ severely refined
Notations and remarks	Mildly refined: IARC group 1 carcinogen
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Oil mist, mineral
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
Notations and remarks	(I)
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

White mineral oil (petroleum) (8042-47-5)	
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
OEL STEL	10 mg/m ³
Regulatory reference	Yukon Occupational Health Regulations O.I.C. 1986/164
USA - ACGIH - Occupational Exposure Limits	
Local name	Mineral oil, excluding metal working fluids Pure, highly and severely refined
ACGIH TWA (mg/m ³)	5 mg/m ³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2019
USA - OSHA - Occupational Exposure Limits	
Local name	Oil mist, mineral
OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Mist
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Magnesium oxide (1309-48-4)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Magnesium oxide fume
OEL TWA	10 mg/m ³
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 150/2020)
Canada (Quebec) - Occupational Exposure Limits	
Local name	Magnesium oxide
VEMP (OEL TWA)	10 mg/m ³ Id
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ Fume (Inhalable) 3 mg/m ³ Respirable dust and fume, as Mg
OEL STEL	10 mg/m ³ Respirable dust and fume, as Mg
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ (I - Inhalable particulate matter)
Notations and remarks	TLV® Basis: URT; metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ (I - Inhalable particulate matter)
Notations and remarks	TLV® Basis: URT; metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Magnesium oxide (1309-48-4)	
Regulatory reference	ACGIH
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ (I - Inhalable particulate matter)
Notations and remarks	TLV® Basis: URT; metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction)
OEL STEL	20 mg/m ³ (inhalable fraction)
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ (inhalable fraction)
OEL STEL	20 mg/m ³ (inhalable fraction)
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (I - Inhalable fraction)
Notations and remarks	(I)
Regulatory reference	Ontario Occupational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Magnesium oxide
OEL TWA	10 mg/m ³ (I - Inhalable particulate matter)
Notations and remarks	TLV® Basis: URT; metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction)
OEL STEL	20 mg/m ³ (inhalable fraction)
Regulatory reference	The Occupational Health and Safety Regulations, 1996. Chapter O-1.1 Reg 1
USA - ACGIH - Occupational Exposure Limits	
Local name	Magnesium oxide
ACGIH TWA (mg/m ³)	10 mg/m ³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT; metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Magnesium oxide fume - Total Particulate
OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
Manufacturer assigned exposure limit(s)	TWA: 1200 mg/m ³
Aluminum oxide (1344-28-1)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Aluminum oxide (Alumina)
OEL TWA	10 mg/m ³
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 182/2019)
Canada (Quebec) - Occupational Exposure Limits	
Local name	Aluminum oxide (as Al)
VEMP (OEL TWA)	10 mg/m ³ Td
Notations and remarks	Note 1: The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	10 mg/m ³
OEL STEL	20 mg/m ³
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Aluminum oxide
OEL TWA	10 mg/m ³
OEL STEL	20 mg/m ³
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-124-2018)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	10 mg/m ³
OEL STEL	20 mg/m ³
Regulatory reference	The Occupational Health and Safety Regulations, 1996. Chapter O-1.1 Reg 1
USA - OSHA - Occupational Exposure Limits	
Local name	alpha-Alumina
OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide adequate ventilation to minimize dust and/or vapor concentrations. Ensure exposure is below occupational exposure limits (where available). Local exhaust ventilation (LEV) may be required to control inhalation exposure.
- Environmental exposure controls : Avoid release to the environment. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ensure that the emission levels from local regulations or operating permits are not exceeded.

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

In case of repeated or prolonged contact wear gloves. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Eye protection:

If there is a risk of liquid being splashed : Safety glasses

Skin and body protection:

Long-sleeved protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Short term exposure: Respiratory protective device with a combined gas and particle filter. Long term exposure: Wear a self contained breathing apparatus

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Paste.
Color	: White
Odor	: Mild
Odor threshold	: No data available
pH	: 7 – 9
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 68 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.04 (Water = 1)
Density	: ≈ 1.04 g/ml
Solubility	: Water: Dispersible
Log Pow	: No data available
Viscosity, kinematic	: > 20.5 mm ² /s (40 °C)
Explosive properties	: On heating : May form flammable/explosive vapor-air mixture.
Oxidizing properties	: Not oxidizing.

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Explosion limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended handling and storage conditions (see section 7). Combustible liquid.
Chemical stability : Stable under recommended handling and storage conditions (see section 7).
Possibility of hazardous reactions : On heating : May form flammable/explosive vapor-air mixture. May react violently with oxidants.
Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not allow product to dry out.
Incompatible materials : Oxidizing agents.
Hazardous decomposition products : Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide.
Hardening time: : No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Potassium hydroxide (1310-58-3)	
LD50 oral, rat	333 mg/kg (OECD 425 method)
White mineral oil (petroleum) (8042-47-5)	
LD50 oral, rat	> 5000 mg/kg
LD50 dermal, rabbit	> 2000 mg/kg
LC50 inhalation, rat (mg/l)	> 5 mg/l 4 Hours
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)	
LD50 oral, rat	> 5000 mg/kg (OECD 401 method), (Read-across)
LD50 dermal, rabbit	> 5000 mg/kg (OECD 402 method), (Read-across)
LC50 inhalation, rat (mg/l)	> 5000 mg/m ³ - 4 Hours, vapors (OECD 403 method), (Read-across)
Aluminum oxide (1344-28-1)	
LD50 oral, rat	> 5000 mg/kg body weight
LC50 inhalation, rat (Dust/Mist - mg/l/4h)	> 2.3 mg/l - 4 Hours (OECD 403 method)

Skin corrosion/irritation : Not classified
pH: 7 – 9
Serious eye damage/irritation : Not classified
pH: 7 – 9
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Polarshine 12	
Viscosity, kinematic	> 20.5 mm ² /s (40 °C)
Potential Adverse human health effects and symptoms	: Repeated exposure may cause skin dryness or cracking. May degrease the skin. Dried out product can release dust. High concentrations of dust may cause respiratory irritation.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

White mineral oil (petroleum) (8042-47-5)	
BCF - Fish [1]	0.4 – 10900 l/kg (20 °C, pH: 7), (QSAR)
Log Pow	4.3 – 18.02 (20 °C, pH: 7), (QSAR)
Log Koc	3.58 – 14.7 (20 °C, pH: 7), (QSAR)

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)	
BCF - Fish [1]	23.4 l/kg (QSAR)

12.2. Persistence and degradability

Polarshine 12	
Persistence and degradability	No information available.

Potassium hydroxide (1310-58-3)	
Persistence and degradability	Not relevant for inorganic substances.

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)	
Persistence and degradability	Readily biodegradable.

Aluminum oxide (1344-28-1)	
Persistence and degradability	Not relevant for inorganic substances.

12.3. Bioaccumulative potential

Polarshine 12	
Bioaccumulative potential	No information available.

Potassium hydroxide (1310-58-3)	
Bioaccumulative potential	Low bioaccumulation potential.

White mineral oil (petroleum) (8042-47-5)	
BCF - Fish [1]	0.4 – 10900 l/kg (20 °C, pH: 7), (QSAR)
Log Pow	4.3 – 18.02 (20 °C, pH: 7), (QSAR)
Log Koc	3.58 – 14.7 (20 °C, pH: 7), (QSAR)

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)	
Bioaccumulative potential	Low bioaccumulation potential.

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)

BCF - Fish [1]	23.4 l/kg (QSAR)
----------------	------------------

12.4. Mobility in soil

Polarshine 12

Ecology - soil	No information available.
----------------	---------------------------

Potassium hydroxide (1310-58-3)

Mobility in soil	Not expected to adsorb to soil
------------------	--------------------------------

White mineral oil (petroleum) (8042-47-5)

Log Koc	3.58 – 14.7 (20 °C, pH: 7), (QSAR)
---------	------------------------------------

Log Pow	4.3 – 18.02 (20 °C, pH: 7), (QSAR)
---------	------------------------------------

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)

Ecology - soil	Immiscible with water.
----------------	------------------------

Aluminum oxide (1344-28-1)

Ecology - soil	Insoluble in water.
----------------	---------------------

12.5. Other adverse effects

Ozone : Not classified
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

TDG
Transport hazard class(es) (TDG) : Not applicable

DOT
Transport hazard class(es) (DOT) : Not applicable

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (TDG) : Not applicable

Packing group (DOT) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : No special precautions required

TDG

No data available

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Potassium hydroxide (1310-58-3)

Listed on the Canadian DSL (Domestic Substances List)

White mineral oil (petroleum) (8042-47-5)

Listed on the Canadian DSL (Domestic Substances List)

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)

Listed on the Canadian DSL (Domestic Substances List)

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)

Listed on the Canadian DSL (Domestic Substances List)

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Magnesium oxide (1309-48-4)

Listed on the Canadian DSL (Domestic Substances List)

Aluminum oxide (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Potassium hydroxide (1310-58-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

White mineral oil (petroleum) (8042-47-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics (90622-58-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

(Z)-Octadec-9-enylamine, ethoxylated (26635-93-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Magnesium oxide (1309-48-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum oxide (1344-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

Issue date : 08/23/2021

Data sources : Hazardous Products Regulation (February 11, 2015).

Other information : None.

Full text of H-phrases:

H227	Combustible liquid
H290	May be corrosive to metals
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Abbreviations and acronyms:	
	ACGIH (American Conference of Government Industrial Hygienists)
	BCF (Bioconcentration Factor/Bioconcentration factor)
	CAS (Chemical Abstracts Service) number
	DOT (Department Of Transportation (US))
	EC50 (Effective Concentration 50%)
	IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50%)
	LD50 (Lethal Dose 50%)
	NIOSH (National Institute for Occupational Safety and Health)
	NOEC (No Observed Effect Concentration)
	NOEL (No Observed Effect Level)
	OECD (Organisation for Economic Co-operation and Development)
	OSHA (Occupational Safety and Health Administration) (US)
	OEL (Occupational exposure limit)
	QSAR (Quantitative Structure-Activity Relationship)
	STEL (Short Term Exposure Limit)
	TSCA (Toxic Substances Control Act) (US)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)

Safety Data Sheet (SDS), Canada

Polarshine 12

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

All rights reserved. Copying and/or downloading of this information/document for the purpose of properly utilizing or obtaining information regarding products by Mirka Ltd is allowed provided that the information is copied and retrieved in full with no changes or modifications unless prior written permission is obtained from Mirka Ltd, and neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon. In case a modified or signed copy of this information/document is needed for your purposes, please contact Mirka Ltd for obtaining such.

Disclaimer: The information provided in this document related to material content and/or composition and/or instructions regarding use or application of product(s) by Mirka Ltd represents Mirka Ltd's knowledge, understanding and belief, which may be based in whole or in part on information provided to Mirka Ltd by suppliers of Mirka Ltd and is believed to be correct at the time publishing this information/document. However, due to the possibility that electronic transfer of this information/document may have resulted in errors, omissions or alterations in this information or information provided to Mirka may be incomplete, Mirka Ltd makes no representations as to its completeness or accuracy. This information/document is intended to answer commonly asked questions about product(s) in question by Mirka Ltd and is not intended to be a comprehensive listing of all substances or materials that may be of interest or that may be regulated in or for this or other products by Mirka Ltd, nor is it intended to be a comprehensive summary of any and all regulations that may apply to this product. Where substances or materials are listed, their listing does not constitute or intend to constitute a judgment as to their safety, environmental or health impacts. Information is supplied upon the condition that the persons receiving the same will make their own determination as to its suitability for their purposes prior to use or application of the product and will follow any given instructions of use where made available by Mirka Ltd. Customers are encouraged to consult with legal and regulatory experts to determine applicable regulations in light of intended use of the product and contact Mirka Ltd in case of questions regarding the product. To the maximum extent permitted by law, Mirka Ltd **MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE.**

Limitation of Remedies and Liability: In the event any product by Mirka Ltd is proven not to conform with the information in this document, then to the maximum extent permitted by law, Mirka Ltd's entire liability and customer's exclusive remedy, will be at Mirka Ltd's option and choice either replacement of the product in question with a conforming product or refund of the purchase price paid by the customer for each non-conforming product, within a reasonable time after written notification of the said non-conformance and return of the said product to Mirka Ltd. Mirka Ltd reserves the right to inspect the product for claimed non-conformance when needed. Mirka Ltd shall not under any circumstances be liable for indirect, incidental, special, or consequential damages (including but not limited to loss of profits, revenue, or business) related to or arising out of this certification, including, the use, misuse or inability to use the product. Unless stated otherwise in writing, the foregoing language cannot be waived, modified, or supplemented in any manner whatsoever.