SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Polarshine 10 Polishing Compound

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

1.2.1 Relevant uses

Polishing agent

1.2.2 Uses advised against

For all uses not specified in SECTION 1.2.1

1.3 Details of the supplier of the safety data sheet

Company

KWH Mirka Ltd
Pensalavägen 210
66850 Jeppo / FINLAND
Phone +358 20 760 2111
Fax +358 20 760 2290
Homepage www.mirka.com
E-mail sales@mirka.com

Address enquiries to

Technical information sales@mirka.com

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2: H319 Causes serious eye irritation.
Flam. Liq. 4: H227 Combustible Liquid.

2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

Hazard pictograms

Signal word WARNING

Hazard statements

H319 Causes serious eye irritation.
H227 Combustible Liquid.

Precautionary statements

P280 Wear eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

P102 Keep out of reach of children.
P210 Keep away from flames and hot surfaces.- No smoking.
P370+P378 In case of fire: Use Water spray, Carbon dioxide, Foam, Dry chemical to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container to in accordance with local/regional/national/ international regulation.

Special labelling

Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

Human health dangers Has a degreasing effect on the skin.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
10 - < 25	Distillates (petroleum), hydrotreated light
	CAS: 64742-47-8, EINECS/ELINCS: 265-149-8, EU-INDEX: 649-422-00-2
	GHS/CLP: Flam. Liq. 4: H227 - Asp. Tox. 1: H304
10 - < 20	Aluminium oxide
	CAS: 1344-28-1, EINECS/ELINCS: 215-691-6, Reg-No.: 01-2119529248-35-XXXX
1 - < 10	White mineral oil (petroleum)
	CAS: 8042-47-5, EINECS/ELINCS: 232-455-8, Reg-No.: 01-2119487078-27-XXXX
	GHS/CLP: Asp. Tox. 1: H304
1 - < 5	Glycerol
	CAS: 56-81-5, EINECS/ELINCS: 200-289-5
1 - < 3	Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydoxy-,branched /
	Reg-No.: 02-2119552461-55-0000
	GHS/CLP: Acute Tox. 4: H302 - Eye Dam. 1: H318

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change soaked clothing.

Inhalation Ensure supply of fresh air.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

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.

Ingestion Supply with medical care.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Forward this sheet to the doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Not combusted hydrocarbons.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g. general-purpose binder).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid spilling in enclosed areas.
Use solvent-resistant equipment.
During mechanical processing vacuuming at processing machines is necessary.

Keep away from all sources of ignition - Refrain from smoking.

Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Use barrier skin cream.
Contaminated work clothing should not be allowed out of the workplace.
Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.
Keep only in original container.

Do not store together with oxidizing agents.

Protect from heat/overheating.
Keep container in a well-ventilated place.
Keep container tightly closed.
Keep away from frost.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (US)

Range [%]	Substance
10 - < 25	Distillates (petroleum), hydrotreated light
	CAS: 64742-47-8, EINECS/ELINCS: 265-149-8, EU-INDEX: 649-422-00-2
	Long-term exposure: 165 ppm, 1200 mg/m³, manufacture
10 - < 20	Aluminium oxide
	CAS: 1344-28-1, EINECS/ELINCS: 215-691-6, Reg-No.: 01-2119529248-35-XXXX
	Long-term exposure: 10 mg/m³, (E,N)
1 - < 10	White mineral oil (petroleum)
	CAS: 8042-47-5, EINECS/ELINCS: 232-455-8, Reg-No.: 01-2119487078-27-XXXX
	Long-term exposure: 5 mg/m³, TWA (as mist)

DNEL

Range [%]	Substance
1 - < 10	White mineral oil (petroleum), CAS: 8042-47-5
	Industrial, inhalative, Long-term - systemic effects: 160 mg/m³.
	Industrial, dermal, Long-term - systemic effects: 220 mg/kg bw/d.
	general population, oral, Long-term - systemic effects: 40 mg/kg bw/d.
	general population, dermal, Long-term - systemic effects: 92 mg/kg bw/d.
	general population, inhalative, Long-term - systemic effects: 35 mg/m³.

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Safety glasses.

Hand protection
The details concerned are recommendations. Please contact the glove supplier for further information.
In full contact:
> 0,4 mm: Butyl rubber, >480 min (EN 374).
In splash contact
> 0,4 mm: Nitrile rubber, >480 min (EN 374).

Skin protection
Protective clothing.

Do not inhale gases/vapours/aerosols.
Avoid contact with eyes and skin.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

Respiratory protection
Breathing apparatus in the event of high concentrations.
Short term: filter apparatus, combination filter A-P1.

Thermal hazards
No information available.

Delimitation and monitoring of the environmental exposition
Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	pasty
Color	white
Odor	mild
Odour threshold	not determined
pH-value	7-8
pH-value [1%]	not determined
Boiling point [°C]	not determined
Flash point [°C]	> 65°C / > 149°F
Flammability [°C]	not determined
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	~1,05
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	>20,5 mm²/s (40°C/ 104°F)
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature [°C]	not determined

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, oral, > 2000 mg/kg bw.

Range [%]	Substance
1 - < 10	White mineral oil (petroleum), CAS: 8042-47-5
	LD50, oral, Rat: > 5000 mg/kg.
	LD50, dermal, Rabbit: > 2000 mg/kg.
1 - < 5	Glycerol, CAS: 56-81-5
	LD50, oral, Rat: 12 600 mg/kg.
1 - < 3	Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydoxy-,branched /
	LD50, oral, Rat: 500-2000 mg/kg (OECD 423).
10 - < 25	Distillates (petroleum), hydrotreated light, CAS: 64742-47-8
	LD50, dermal, Rabbit: > 5000 mg/kg bw.
	LD50, oral, Rat: > 5000 mg/kg bw.
	LC50, inhalativ (vapour), Rat: > 5000 mg/m³.

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	Frequent persistent contact with the skin can cause skin irritation.
	Toxicological data of complete product are not available. The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists.

SECTION 12: Ecological information

12.1 Toxicity

Range [%]	Substance
1 - < 5	Glycerol, CAS: 56-81-5
	LC50, (24h), fish: > 5000 mg/l.
1 - < 3	Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydoxy-,branched /
	LC50, (96h), Leuciscus idus: 1-10 mg/l.
	EC50, (72h), Algae: 1-10 mg/l.
	EC50, (48h), Daphnia magna: 1-10 mg/l.
	EC10, Bacteria: > 10000 mg/l/17h (DIN 38412 Part 8).
10 - < 25	Distillates (petroleum), hydrotreated light, CAS: 64742-47-8
	EL0, (48h), Daphnia magna: 1000 mg/l.
	EL0, (72h), Pseudokirchneriella subcapitata: 1000 mg/l.
	LL0, (96h), Oncorhynchus mykiss: 1000 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment.
No classification on the basis of the calculation procedure of the preparation directive.

SECTION 13: Disposal considerations

Product	Dispose of as hazardous waste. Coordinate disposal with the authorities if necessary.
Contaminated packaging	Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.
RCRA Hazard Class (40CFR 261)	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

SECTION 14: Transport

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
DOT Road Shipment Information (49 CFR)	UN/NA NA1993 Combustible liquid, n.o.s. Footnote: This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported soleley by land. Comb liq III
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

US Regulations

National regulations	29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65
- SARA, 302	This product is not classified as hazardous under SARA 302.
- SARA, 311	This product is classified as hazardous under SARA 311.
- SARA, 313	This product contain one ingredient regulated under this list(40 CFR part 372.65): Aluminum oxide (fume or dust) (CAS 1344-28-1). This product contain one ingredient regulated under this list(40 CFR part 372.65): Cyclohexane (CAS 110-82-7)
- CA Proposition 65	No chemical substances in this material are named on the California P65 list.
- TSCA	Some chemical substances in this material are not included on or not exempted from listing on the TSCA Inventory.
- FDA	not determined
American Conference of Governmental Industrial Hygienists - ACGIH	Ingredients not listed as carcinogens.
International Agency for Research on Cancer IARC	Ingredients not listed as carcinogens.
National Toxicology Program - NTP	This product is named NTP - National Toxicology Program (contains glycerol). This product is named NTP - National Toxicology Program (contains cyclohexane).
HAP-VOC	ca. 23%
Transport-regulations	DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2015).

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H227 Combustible Liquid.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.

16.2 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;
ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route;
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses;
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure;
CAS = Chemical Abstracts Service;
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;
CFR = Code of Federal Regulations;
CPR = Controlled Products Regulations;
DMEL = Derived Minimum Effect Level;
DNEL = Derived No Effect Level;
DOT = Department of Transportation;
EC50 = Median effective concentration;
EPA = Environmental Protection Agency;
GHS = Globally Harmonized System of Classification and Labelling of Chemicals;
IATA = International Air Transport Association;
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
IC50 = Inhibition concentration, 50%;
IMDG = International Maritime Code for Dangerous Goods;
IARC = International Agency of Research on Cancer;
IATA = International Air Transport Association;
TSCA = Toxic Substance Control Act;
HMIS = Hazardous Materials Identification System;
NFPA = National Fire Protection Association;
NIOSH = National Institute for Occupational Safety and Health;
OSHA = Occupational Safety and Health Administration;
LC50 = Lethal concentration, 50%;
LD50 = Median lethal dose, 50%;
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;
PBT = Persistent, Bioaccumulative and Toxic substance;
PNEC = Predicted No-Effect Concentration;
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;
SARA = Superfund Amendments and Reauthorization Act;
TLV®/TWA = Threshold limit value – time-weighted average;
TLV®STEL = Threshold limit value – short-time exposure limit;
VOC = Volatile Organic Compounds;
vPvB = very Persistent and very Bioaccumulative;

16.3 Ratings

HMIS Ratings

HEALTH	**2**	2 - Moderate Hazard
FLAMMABILITY	**2**	2 - Moderate Hazard
REACTIVITY	**1**	1 - Slight Hazard
PERSONAL PROTECTION	**X**	X - Personal protection rating to be supplied by user depending on use conditions

NFPA Ratings

2	
2	1
-	

TOP, FLAMMABILITY: 2 - Moderate Hazard
LEFT, HEALTH: 2 - Moderate Hazard RIGHT, REACTIVITY: 1 - Slight Hazard
BOTTOM, SPECIAL NOTICE: -