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

Company +358 20 760 2111 (8:00 - 16:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Irrit. 2: H319 Causes serious eye irritation.

2.2 Label elements

The product is classified and required to be labelled in accordance with EC-Directives

Hazard pictograms

Signal word WARNING

Hazard statements H319 Causes serious eye irritation.

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.

Special labelling EUH066 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	Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
	EINECS/ELINCS: 926-141-6, Reg-No.: 01-2119456620-43-0000
	GHS/CLP: 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 and R-phrases: 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 (GB)

Range [%]	Substance
10 - < 25	Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
	EINECS/ELINCS: 926-141-6, Reg-No.: 01-2119456620-43-0000
	Long-term exposure: 1200 mg/m³
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, inhalable dust (respirable dust: 4 mg/m³)
1 - < 5	Glycerol
	CAS: 56-81-5, EINECS/ELINCS: 200-289-5
	Long-term exposure: 10 mg/m³, (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.

Other
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 of the hazardous substances handled. The resistance of these equipments 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 (solid, gas) [°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	Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
	LD50, dermal, Rat: >5000 mg/kg (OECD 402).
	LD50, oral, Rat: >5000 mg/kg (OECD 401).
	LC50, inhalative, Rat: >5000 mg/m³/8h (OECD 403).

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	Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
	EL0, (72h), Pseudokirchneriella subcapitata: 1000 mg/l.
	EL0, (48h), Daphnia magna: 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

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 120120*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*

SECTION 14: Transport information

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
Inland navigation (ADN)	NO DANGEROUS GOODS
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 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

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2015).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (1999/13/CE)	ca. 23 %

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

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

16.2 Abbreviations and acronyms:

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
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
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
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
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
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 Other information

Classification procedure

Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)

Modified position

SECTION 3 been added: Glycerol

SECTION 3 been added: White mineral oil (petroleum)

SECTION 3 been added: Aluminium oxide

SECTION 2 been added: H319 Causes serious eye irritation.

SECTION 2 been added: Eye Irrit. 2

SECTION 4 been added: If eye irritation persists: Get medical advice/attention.

SECTION 4 been added: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 7 been added: Contaminated work clothing should not be allowed out of the workplace.

SECTION 7 been added: Contaminated work clothing should not be allowed out of the workplace.