

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : Polarshine 15

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Use of the substance/mixture : Polishing agent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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)
CHEMTREC UK: +(44)-870-8200418 (English)
CHEMTREC Ireland (Dublin): +(353)-19014670 (English, Irish Gaelic)
Multilingual response for emergency calls only. Non-emergency calls cannot be serviced at these numbers.

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.
EUH208 - Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

Other hazards not contributing to the classification : Repeated or prolonged contact may cause skin irritation. Dried out product can release dust. High concentrations of dust may cause respiratory irritation. Contains <0.1% respirable Cryptocrystalline silica. Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|----------|--|
| Siliceous earth | (CAS-No.) 1020665-14-8 (EC No.) 310-127-6 | 40 - 50 | Not classified |
| Amorphous silica | (CAS-No.) 7631-86-9 (EC No.) 231-545-4 | 40 - 50 | Not classified |
| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | (EC No.) 926-141-6 (REACH-no) 01-2119456620-43-XXXX | 10 - 20 | Asp. Tox. 1, H304 |
| White mineral oil (petroleum) | (CAS-No.) 8042-47-5 (EC No.) 232-455-8 (REACH-no) 01-2119487078-27-XXXX | 5 - < 10 | Asp. Tox. 1, H304 |
| Glycerol | (CAS-No.) 56-81-5 (EC No.) 200-289-5 | 3 - < 5 | Not classified |
| Cryptocrystalline silica | (CAS-No.) 7631-86-9 | < 0.1 | STOT RE 1, H372 |
| 1,2-Benzisothiazol-3(2H)-one | (CAS-No.) 2634-33-5 (EC No.) 220-120-9 (EC index No.) 613-088-00-6 (REACH-no) 01-2120761540-60-XXXX | < 0.05 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 |
| Sodium hydroxide | (CAS-No.) 1310-73-2 (EC No.) 215-185-5 (EC index No.) 011-002-00-6 (REACH-no) 01-2119457892-27-XXXX | < 0.1 | Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| 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). |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. If symptoms develop, obtain medical attention. |
| 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 or rash 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. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-------------------------------------|--|
| Symptoms/effects after inhalation | : Dried out product can release dust. High concentrations of dust may cause respiratory irritation. |
| Symptoms/effects after skin contact | : Repeated or prolonged contact may cause skin irritation. Repeated exposure may cause skin dryness or cracking. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Water spray. Carbon dioxide.
Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid inhalation of dust from dried product.

6.1.1. For non-emergency personnel

Emergency procedures : Remove all sources of ignition. Ventilate area. Avoid inhalation of vapours. Avoid contact with skin and eyes. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required. See Section 8.
Emergency procedures : Remove all sources of ignition. Ventilate area. Avoid inhalation of vapours. Avoid contact with skin and eyes.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material 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.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

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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 vapour is heavier than air, spreads along the ground and distant ignition is possible. Provide good ventilation in process area to prevent formation of vapour. Use solvent resistant equipment. Avoid contact with skin and eyes. Avoid inhalation of vapours. 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 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 : Oxidising agents.

7.3. Specific end use(s)

Polishing agent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Glycerol (56-81-5) | |
|---|--------------------------------------|
| United Kingdom - Occupational Exposure Limits | |
| Local name | Glycerol |
| WEL TWA (mg/m ³) | 10 mg/m ³ mist |
| Regulatory reference | EH40/2005 (Third edition, 2018). HSE |

| White mineral oil (petroleum) (8042-47-5) | |
|---|---|
| EU - Occupational Exposure Limits | |
| Local name | Mineral oils (AHRMO) |
| IOELV TWA (mg/m ³) | 5 mg/m ³ (inhalable fraction) |
| Notes | (Year of adoption 2010) |
| Regulatory reference | SCOEL Recommendations |
| Ireland - Occupational Exposure Limits | |
| Local name | Mineral oil |
| OEL (8 hours ref) (ppm) | 5 ppm Pure, Highly & Severely Refined (Inhalable) |
| Regulatory reference | Code of Practice for the Chemical Agents Regulations 2018 |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | |
|--|-----------------------------|
| EU - Occupational Exposure Limits | |
| Manufacturer assigned exposure limit(s) | TWA: 1200 mg/m ³ |

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Cryptocrystalline silica (7631-86-9)

EU - Occupational Exposure Limits

| | |
|---|--------------------------|
| Manufacturer assigned exposure limit(s) (TWA) | <= 0.1 mg/m ³ |
|---|--------------------------|

Sodium hydroxide (1310-73-2)

Ireland - Occupational Exposure Limits

| | |
|---------------------------------------|---|
| Local name | Sodium hydroxide |
| OEL (15 min ref) (mg/m ³) | 2 mg/m ³ |
| Regulatory reference | Code of Practice for the Chemical Agents Regulations 2018 |

United Kingdom - Occupational Exposure Limits

| | |
|-------------------------------|--------------------------------------|
| Local name | Sodium hydroxide |
| WEL STEL (mg/m ³) | 2 mg/m ³ |
| Regulatory reference | EH40/2005 (Third edition, 2018). HSE |

Amorphous silica (7631-86-9)

Ireland - Occupational Exposure Limits

| | |
|--|---|
| Local name | Silica, amorphous |
| OEL (8 hours ref) (mg/m ³) | 6 mg/m ³ total inhalable dust 2.4 mg/m ³ respirable dust |
| Regulatory reference | Chemical Agents Code of Practice 2020 |

United Kingdom - Occupational Exposure Limits

| | |
|------------------------------|---|
| Local name | Silica, amorphous |
| WEL TWA (mg/m ³) | 6 mg/m ³ inhalable dust 2.4 mg/m ³ respirable dust |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

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

DNEL/DMEL (Workers)

| | |
|--|--------------------------|
| Long-term - systemic effects, dermal | 220 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 160 mg/m ³ |

DNEL/DMEL (General population)

| | |
|--|-------------------------|
| Long-term - systemic effects, oral | 40 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 35 mg/m ³ |
| Long-term - systemic effects, dermal | 92 mg/kg bodyweight/day |

Sodium hydroxide (1310-73-2)

DNEL/DMEL (Workers)

| | |
|---------------------------------------|---------------------|
| Long-term - local effects, inhalation | 1 mg/m ³ |
|---------------------------------------|---------------------|

DNEL/DMEL (General population)

| | |
|---------------------------------------|---------------------|
| Long-term - local effects, inhalation | 1 mg/m ³ |
|---------------------------------------|---------------------|

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8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation to minimise dust and/or vapour concentrations. Ensure exposure is below occupational exposure limits (where available). Local exhaust ventilation (LEV) may be required to control inhalation exposure. EN 482: Workplace exposure - General requirements for the performance of procedures for the measurement of chemical agents.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

In case of repeated or prolonged contact wear gloves. Splash contact: Nitrile rubber: Material thickness: > 0.4 mm, Breakthrough time: > 480 minutes. Full contact: Butyl rubber: Material thickness: > 0.4 mm, Breakthrough time: > 480 minutes. Standard EN 374 - Protective gloves against chemicals. 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. Standard EN 166 - Personal eye-protection.

Skin and body protection:

Long-sleeved protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Short term exposure: Combined gas/dust mask with filter type A/P1. Standard EN 14387 - Gas filter(s), combined filter(s). Long term exposure: Wear a self contained breathing apparatus

Thermal hazard protection:

Not required for normal conditions of use.

Environmental exposure controls:

Avoid release to the environment. Ensure that the emission levels from local regulations or operating permits are not exceeded.

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. |
| Colour | : Yellow. Beige. |
| Odour | : Mild. |
| Odour threshold | : No data available |
| pH | : 7 – 8 |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 65 °C |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : ≈ 1.4 (Water = 1) |
| Density | : ≈ 1.4 g/ml |
| Solubility | : Water: Dispersible |
| Log Pow | : No data available |

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| | |
|----------------------|---|
| Viscosity, kinematic | : > 20.5 mm ² /s (40 °C) |
| Viscosity, dynamic | : No data available |
| Explosive properties | : On heating : May form flammable/explosive vapour-air mixture. |
| Oxidising properties | : Not oxidising. |
| Explosive limits | : No data available |

9.2. Other information

VOC content : ≈ 15 – 20 % (99/13/EC)

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7). Combustible liquid.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

On heating : May form flammable/explosive vapour-air mixture. May react violently with oxidants.

10.4. 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.

10.5. Incompatible materials

Oxidising agents.

10.6. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide.

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 |
| Additional information | : Based on available data, the classification criteria are not met |

| Glycerol (56-81-5) | |
|-----------------------------|--------------------------|
| LD50 oral, rat | 27200 mg/kg |
| LD50 dermal | 56750 mg/kg (Guinea pig) |
| LC50 inhalation, rat (mg/l) | > 2.75 mg/l - 4 Hours |

| 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-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | |
|--|--|
| LD50 oral, rat | > 5000 mg/kg (OECD 401 method), (Read-across) |
| LD50 dermal, rabbit | > 5000 mg/kg (OECD 403 method), (Read-across) |
| LC50 inhalation, rat (mg/l) | > 5000 mg/m ³ - 4 Hours, vapours (OECD 403 method), (Read-across) |

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| 1,2-Benzisothiazol-3(2H)-one (2634-33-5) | |
|--|---|
| LD50 oral, rat | 490 mg/kg bodyweight (OECD 401 method) |
| LD50 dermal, rat | > 2000 mg/kg bodyweight (OECD 402 method) |

| Amorphous silica (7631-86-9) | |
|------------------------------|---|
| LD50 oral, rat | > 5000 mg/kg bodyweight (OECD 401 method) |
| LC50 inhalation, rat (mg/l) | > 0.14 mg/l/4h (Dust), (OECD 403 method) |

| | |
|-----------------------------------|--|
| Skin corrosion/irritation | : Not classified pH: 7 – 8 |
| Additional information | : Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified pH: 7 – 8 |
| Additional information | : Based on available data, the classification criteria are not met |
| Respiratory or skin sensitisation | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Germ cell mutagenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |

| Cryptocrystalline silica (7631-86-9) | |
|--------------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| Amorphous silica (7631-86-9) | |
|------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| | |
|------------------------|--|
| Reproductive toxicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-single exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-repeated exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |

| Polarshine 15 | |
|----------------------|-----------------------------------|
| Viscosity, kinematic | > 20.5 mm ² /s (40 °C) |

| | |
|---|--|
| Potential adverse human health effects and symptoms | : Repeated or prolonged contact may cause skin irritation. Repeated exposure may cause skin dryness or cracking. 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) | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

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| Glycerol (56-81-5) | |
|---------------------------|---|
| LC50 fish | 54000 mg/l - 96 Hours (Salmo gairdneri) |
| EC50 Daphnia | 1955 mg/l - 48 Hours (Daphnia magna) |

| White mineral oil (petroleum) (8042-47-5) | |
|--|--|
| LL50, fish, acute | > 10000 mg/l (96 Hours, Leuciscus idus melanotus, WAF (Water Accommodated Fraction) (OECD 203 method)) |
| LL50, aquatic invertebrates, acute | > 100 mg/l (48 Hours, Daphnia magna, Mobility, WAF (Water Accommodated Fraction) (OECD 202 method)) |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | |
|--|--|
| LL50, fish, acute | > 1000 mg/l (96 Hours, Oncorhynchus mykiss, WAF (Water Accommodated Fraction) (OECD 203 method)) |
| NOELr, fish, Chronic | 0.173 mg/l (28 days, Oncorhynchus mykiss, Growth rate (QSAR)) |
| LL50, aquatic invertebrates, acute | > 10000 mg/l (48 Hours, Chaetogammarus marinus, WAF (Water Accommodated Fraction)) |
| LL50, aquatic invertebrates, acute | > 1000 mg/l (48 Hours, Daphnia magna, Mobility, WAF (Water Accommodated Fraction) (OECD 202 method)) |
| NOELr, aquatic invertebrates, Chronic | 1.22 mg/l (21 days, Daphnia magna, reproduction (QSAR)) |
| EL50, algae, acute | > 1000 mg/l (72 Hours, Pseudokirchneriella subcapitata, Growth rate/cell numbers (OECD 201 method)) |
| NOELr, algae | 1000 mg/l (72 Hours, Pseudokirchneriella subcapitata, Growth rate/cell numbers (OECD 201 method)) |

| Sodium hydroxide (1310-73-2) | |
|-------------------------------------|--------------------------------------|
| LC50 fish | 35 – 189 mg/kg |
| EC50 Daphnia | 40.4 mg/l - 48 Hours (Daphnia magna) |

| 1,2-Benzisothiazol-3(2H)-one (2634-33-5) | |
|---|--|
| LC50 fish | 2.15 mg/l - 96 Hours (Onchorynchus mykiss), (OECD 203 method) |
| EC50 Daphnia | 2.9 mg/l - 48 Hours (Daphnia magna), (OECD 202 method) |
| ErC50 (algae) | 110 µg/L - 72 Hours (Pseudokirchneriella subcapitata), (OECD 201 method) |
| NOEC, algae | 40.3 µg/l (72 Hours, Pseudokirchneriella subcapitata, Growth rate (OECD 201 method)) |

| Amorphous silica (7631-86-9) | |
|-------------------------------------|--|
| LC50 fish | 1033 mg/l - 96 Hours (Quantitative Structure-Activity Relationship (QSAR)) |
| EC50 Daphnia | 512 mg/l - 48 Hours (Daphnid), (Quantitative Structure-Activity Relationship (QSAR)) |
| EC50 96h algae (1) | 217.6 mg/l - 96 Hours (Quantitative Structure-Activity Relationship (QSAR)) |
| NOEC chronic fish | 57 mg/l - 30 days (Quantitative Structure-Activity Relationship (QSAR)) |
| NOEC chronic algae | 42.1 mg/l - 30 days (Quantitative Structure-Activity Relationship (QSAR)) |

12.2. Persistence and degradability

| Polarshine 15 | |
|-------------------------------|---------------------------|
| Persistence and degradability | No information available. |

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| Glycerol (56-81-5) | |
|-------------------------------|------------------------|
| Persistence and degradability | Readily biodegradable. |
| Biodegradation | 94 % - 24 days |

| Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics | |
|--|---|
| Persistence and degradability | Readily biodegradable, failing 10 day window. |
| Biodegradation | 69 % - 28 days |

| 1,2-Benzisothiazol-3(2H)-one (2634-33-5) | |
|---|----------------------------|
| Persistence and degradability | Not readily biodegradable. |

12.3. Bioaccumulative potential

| Polarshine 15 | |
|---------------------------|---------------------------|
| Bioaccumulative potential | No information available. |

| Glycerol (56-81-5) | |
|---------------------------|----------------------------------|
| Log Pow | -1.75 (25 °C), (OECD 107 method) |

| 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) |

| 1,2-Benzisothiazol-3(2H)-one (2634-33-5) | |
|---|---|
| BCF fish 1 | 6.62 - 3 weeks (Lepomis macrochirus, Whole body), (OECD 305 method) |
| Log Pow | 0.7 (20 °C, pH 7, EU method A.8) |
| Bioaccumulative potential | Not expected to bioaccumulate. |

| Amorphous silica (7631-86-9) | |
|-------------------------------------|---|
| Log Pow | 0.53 (25 °C, pH 7), (Quantitative Structure-Activity Relationship (QSAR)) |

12.4. Mobility in soil

| Polarshine 15 | |
|----------------------|---------------------------|
| Ecology - soil | No information available. |

| White mineral oil (petroleum) (8042-47-5) | |
|--|------------------------------------|
| Log Koc | 3.58 – 14.7 (20 °C, pH: 7), (QSAR) |

| 1,2-Benzisothiazol-3(2H)-one (2634-33-5) | |
|---|-----------------------------------|
| Log Koc | ≈ 0.97 (25 °C), (OECD 121 method) |
| Ecology - soil | Soluble in water. |

12.5. Results of PBT and vPvB assessment

| Polarshine 15 | |
|--|--|
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII | |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII | |

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12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment 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 ADR / IMDG / IATA

14.1. UN number

UN-No. (ADR) : Not regulated
UN-No. (IMDG) : Not regulated
UN-No. (IATA) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not regulated

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

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

14.4. Packing group

Packing group : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : Not classified

14.6. Special precautions for user

Special transport precautions : Not applicable

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

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

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

| Authorisations and/or restrictions on use (Annex XVII): | | |
|---|--|---|
| Reference code | Applicable on | Entry title or description |
| 3. | Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ; White mineral oil (petroleum) | Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 |
| 3(b) | Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ; White mineral oil (petroleum) | Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : $\approx 15 - 20\%$ (99/13/EC)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes: | | | |
|------------------------|--|----------|----------|
| Section | Changed item | Change | Comments |
| 1 | Identification of the substance/mixture and of the company/undertaking | Modified | |
| 2 | Hazards identification | Modified | |
| 3 | Composition/information on ingredients | Modified | |
| 4 | First aid measures | Modified | |
| 5 | Fire fighting measures | Modified | |
| 6 | Accidental release measures | Modified | |
| 7 | Handling and storage | Modified | |
| 8 | Exposure controls/personal protection | Modified | |
| 9 | Physical and chemical properties | Modified | |
| 10 | Stability and reactivity | Modified | |
| 11 | Toxicological information | Modified | |
| 12. | Ecological information | Modified | |
| 13 | Disposal considerations | Modified | |
| 15 | Regulatory information | Modified | |

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| | | | |
|----|-------------------|----------|--|
| 16 | Other information | Modified | |
|----|-------------------|----------|--|

| Abbreviations and acronyms: | |
|-----------------------------|---|
| | ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) |
| | CAS (Chemical Abstracts Service) number |
| | BCF (Bioconcentration factor) |
| | CLP (Classification, Labeling and Packaging) |
| | DNEL (Derived No Effect Level) |
| | EC (European Community) |
| | EC50 (Effective Concentration 50%) |
| | EN (European Norm) |
| | IARC (International Agency for Research on Cancer) |
| | IATA (International Air Transport Association) |
| | IOELV (Indicative Occupational Exposure Limit) |
| | IMDG (International Maritime Dangerous Goods Code) |
| | IMO (International Maritime Organisation) |
| | LC50 (Lethal Concentration 50%) |
| | LD50 (Lethal Dose 50%) |
| | NOEL (No Observed Effect Level) |
| | OECD (Organisation for Economic Co-operation and Development) |
| | OEL (Occupational exposure limit) |
| | PBT (Persistent, Bioaccumulative and Toxic) |
| | PNEC (Predicted No Effect Concentration) |
| | QSAR (Quantitative Structure-Activity Relationship) |
| | REACH (Registration, Evaluation and Authorisation of CHemicals) |
| | STEL (Short Term Exposure Limit) |
| | TWA (Time Weighted Average) |
| | UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods) |
| | vPvB (very Persistent and very Bioaccumulative) |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

| Classification according to Regulation (EC) No. 1272/2008 [CLP]: | |
|--|--|
| Not classified | |

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |

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| | |
|---------------|--|
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Met. Corr. 1 | Corrosive to metals, Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| STOT RE 1 | Specific target organ toxicity — Repeated exposure, Category 1 |
| 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. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH208 | Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request. |

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.