SAFETY DATA SHEET
POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

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

1.1. Product identifier

Product name POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Product number 18200 18201 18203 18205 18210 18210-A, 18215 18220 18582

Internal identification B18902

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

Identified uses All purpose automotive windscreen cleaner

Uses advised against This product is not recommended for any industrial, professional or consumer use other than the identified uses stated above.

1.3. Details of the supplier of the safety data sheet

Supplier

Miswa Chemicals Ltd
Caswell Road
Brackmills
Northampton
England
NN4 7PW
T: +44 (0)1604 701111
F: +44 (0)1604 701120
SDSAdmin@miswa.com

1.4. Emergency telephone number

Emergency telephone T: +44 (0)1604 701111 (Miswa Office Hours Monday - Friday (0900Hrs - 1700Hrs))

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H302 STOT SE 1 - H370

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) T;R23/24/25,R39/23/24/25. R10.

2.2. Label elements

Pictogram

Signal word Danger

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Hazard statements
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H370 Causes damage to organs .

Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground/ bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.
P321 Specific treatment (see medical advice on this label).
P330 Rinse mouth.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.
P102 Keep out of reach of children.

Contains METHANOL

Detergent labelling < 5% perfumes, Contains BENZISOTHIAZOLINONE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

METHANOL **10-30%**

CAS number: 67-56-1 | EC number: 200-659-6 | REACH registration number: 01-2119433307-44-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	F;R11 T;R23/24/25,R39/23/24/25

PROPYLENE GLYCOL **<1%**

CAS number: 57-55-6 | EC number: 200-338-0 | REACH registration number: 01-2119456809-23-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Not Classified	-

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

2,6-DIMETHYL-7-OCTEN-2-OL		**<1%**
CAS number: 18479-58-8	EC number: 242-362-4	REACH registration number: 01-2119457274-37-XXXX

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xi;R36/38.

SODIUM HYDROXIDE		**<1%**
CAS number: 1310-73-2	EC number: 215-185-5	REACH registration number: 01-2119457892-27-XXXX

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	C;R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

Inhalation Remove affected person from source of contamination. Keep affected person away from heat, sparks and flames. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.

Skin contact Remove affected person from source of contamination. Immediately remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation In the unlikely event of over exposure to organic solvent vapours from this product, symptoms which may develop include headache, fatigue, dizziness and nausea.

Ingestion May cause unconsciousness, blindness and possibly death.

Skin contact Skin irritation.

Eye contact May cause blurred vision and serious eye damage.

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

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Alcohol-resistant foam. Carbon dioxide (CO2). Water spray, fog or mist. Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO2). May explode when heated or when exposed to flames or sparks. Solvent vapours may form explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. May form explosive or toxic mixtures with air. Vapour explosion and poison hazard indoors, outdoors and in sewers.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for firefighters Wear chemical protective suit. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In case of spills, beware of slippery floors and surfaces. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. DO NOT touch spilled material! Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. During application and drying, solvent vapours will be emitted. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from oxidising materials, heat and flames. May attack some plastics, rubber and coatings. Take precautionary measures against static discharges.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Long-term exposure limit (8-hour TWA): 2006/15/EC 200 ppm 260 mg/m³
Sk

PROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 474 mg/m3 150 ppm particulate vapour
Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 particulate

2,6-DIMETHYL-7-OCTEN-2-OL

No exposure limit value known.

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

METHANOL (CAS: 67-56-1)

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

DNEL

Industry - Dermal; Short term Acute: 40 mg/kg bw/day
Industry - Dermal; Long term systemic effects: 40 mg/kg bw/day
Industry - Inhalation; Short term Acute: 260 mg/m³
Industry - Inhalation; Long term systemic effects: 260 mg/m³
Consumer - Dermal; Short term Acute: 8 mg/kg bw/day
Consumer - Dermal; Long term systemic effects: 8 mg/kg bw/day
Consumer - Inhalation; Long term systemic effects: 50 mg/m³
Industry - Inhalation; Short term Acute: 260 mg/m³
Industry - Inhalation; Long term local effects: 260 mg/m³
Consumer - Inhalation; Short term Acute: 50 mg/m³
Consumer - Inhalation; Long term local effects: 50 mg/m³

PNEC

- Fresh water; 20.8 mg/l
- Marine water; 2.08 mg/l
- Soil; 3.18 mg/kg soil dw
- STP; 100 mg/l
- Sediment (Freshwater); 77 mg/kg sediment dw
- Intermittent release; 1540 mg/l
- Sediment (Marinewater); 7.7 mg/kg sediment dw

FATTY ALCOHOL ALKOXYLATE 4 (CAS: 111905-53-4)

DNEL

No DNEL available.

PNEC

No PNEC available.

PROPYLENE GLYCOL (CAS: 57-55-6)

DNEL

Industry - Inhalation; Long term systemic effects: 168 mg/m³
Industry - Inhalation; Long term local effects: 10 mg/m³
Consumer - Inhalation; Long term systemic effects: 50 mg/m³
Consumer - Inhalation; Long term local effects: 10 mg/m³

PNEC

- Fresh water; 260 mg/l
- Marine water; 26 mg/l
- STP; 20000 mg/kg
- Sediment (Freshwater); 572 mg/kg
- Sediment (Marinewater); 57.2 mg/kg
- Soil; 50 mg/kg
- Intermittent release; 183 mg/l

2,6-DIMETHYL-7-OCTEN-2-OL (CAS: 18479-58-8)

DNEL

Workers - Inhalation; Long term systemic effects: 73.5 mg/m³
Workers - Dermal; Long term systemic effects: 20.8 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 21.7 mg/m³
General population - Dermal, Oral; Long term systemic effects: 12.5 mg/kg bw/day

PNEC

- Fresh water; 0.0278 mg/l
- Marine water; 0.00278 mg/l
- Intermittent release; 0.278 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 0.594 mg/kg sediment dw
- Sediment (Marinewater); 0.0594 mg/kg sediment dw
- Soil; 0.103 mg/kg soil dw

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

3,7-DIMETHYL-1,6-OCTADIEN-3-OL (CAS: 78-70-6)

DNEL

Workers - Inhalation; Long term systemic effects: 2.8 mg/m³
Workers - Inhalation; Short term Acute: 16.5 mg/m³
Workers - Dermal; Long term systemic effects: 2.5 mg/kg bw/day
Workers - Dermal; Short term Acute: 5 mg/kg bw/day
Workers - Dermal; Long term local effects: 15 mg/cm²
Workers - Dermal; Short term Acute: 15 mg/cm²
General population - Inhalation; Long term systemic effects: 0.7 mg/m³
General population - Inhalation; Short term Acute: 4.1 mg/m³
General population - Dermal; Long term systemic effects: 1.25 mg/kg bw/day
General population - Dermal; Short term Acute: 2.5 mg/kg bw/day
General population - Dermal; Long term local effects: 15 mg/cm²
General population - Dermal; Short term Acute: 15 mg/cm²
General population - Oral; Long term systemic effects: 0.2 mg/kg bw/day
General population - Oral; Short term Acute: 1.2 mg/kg bw/day

PNEC

- Fresh water; 0.2 mg/l
- Marine water; 0.02 mg/l
- Intermittent release; 2 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 2.22 mg/kg sediment dw
- Sediment (Marinewater); 0.222 mg/kg sediment dw
- Soil; 0.327 mg/kg soil dw

CITRAL (CAS: 5392-40-5)

DNEL

Workers - Inhalation; Long term systemic effects: 9 mg/m³
Workers - Dermal; Long term systemic effects: 1.7 mg/kg bw/day
Workers - Dermal; Long term local effects: 0.14 mg/cm²
General population - Inhalation; Long term systemic effects: 2.7 mg/m³
General population - Dermal; Long term systemic effects: 1 mg/kg bw/day
General population - Dermal; Long term local effects: 0.14 mg/cm²
General population - Oral; Long term systemic effects: 0.6 mg/kg bw/day

PNEC

- Fresh water; 0.00678 mg/l
- Marine water; 0.000678 mg/l
- Intermittent release; 0.0678 mg/l
- STP; 1.6 mg/l
- Sediment (Freshwater); 0.125 mg/kg sediment dw
- Sediment (Marinewater); 0.0125 mg/kg sediment dw
- Soil; 0.0209 mg/kg soil dw

d-LIMONENE (CAS: 5989-27-5)

DNEL

Workers - Inhalation; Long term systemic effects: 33.3 mg/m³
Workers - Dermal; Short term local effects, Acute: 0.222 mg/cm²
General population - Inhalation; Long term systemic effects: 8.33 mg/m³
General population - Dermal; Short term local effects, Acute: 0.111 mg/cm²
General population - Oral; Long term systemic effects: 4.76 mg/kg bw/day

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

PNEC
- Fresh water; 0.0054 mg/l
- Marine water; 0.00054 mg/l
- STP; 1.8 mg/l
- Sediment (Freshwater); 1.32 mg/kg sediment dw
- Marine water; 0.13 mg/kg sediment dw
- Soil; 0.262 mg/kg soil dw

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL
Consumer - Inhalation; local effects: 1 mg/m³
Industry - Inhalation; Long term local effects: 1 mg/m³

GERANIOL (CAS: 106-24-1)

DNEL
Workers - Inhalation; Long term systemic effects: 161.6 mg/m³
Workers - Dermal; Long term systemic effects: 12.5 mg/kg bw/day
Workers - Dermal; Long term local effects: 11.8 mg/cm²
General population - Inhalation; Long term systemic effects: 47.8 mg/m³
General population - Dermal; Long term systemic effects: 7.5 mg/kg bw/day
General population - Dermal; Long term local effects: 11.8 mg/cm²
General population - Oral; Long term systemic effects: 13.75 mg/kg bw/day

PNEC
- Fresh water; 0.0108 mg/l
- Marine water; 0.00108 mg/l
- Intermittent release; 0.108 mg/l
- STP; 0.7 mg/l
- Sediment (Freshwater); 0.115 mg/kg
- Sediment (Marinewater); 0.0115 mg/kg
- Soil; 0.0167 mg/kg

BUTYLPHENYL METHYLPROPIONAL (CAS: 80-54-6)

DNEL
Workers - Inhalation; Long term systemic effects: 0.201 mg/m³
Workers - Dermal; Long term systemic effects: 0.0569 mg/kg bw/day
Workers - Dermal; Long term local effects: 0.41 mg/cm²
Workers - Dermal; Short term Acute: 0.41 mg/cm²
General population - Inhalation; Long term systemic effects: 0.0593 mg/m³
General population - Inhalation; Long term local effects: 0.0593 mg/m³
General population - Dermal; Long term systemic effects: 0.0342 mg/kg bw/day
General population - Dermal; Short term Acute: 0.205 mg/cm²
General population - Dermal; Long term local effects: 0.41 mg/cm²
General population - Oral; Long term systemic effects: 0.0342 mg/kg bw/day
General population - Oral; Short term Acute: 0.205 mg/kg bw/day

PNEC
- Fresh water; 0.00204 mg/l
- Marine water; 0.000204 mg/l
- Intermittent release; 0.0204 mg/l
- STP; 1.049 mg/l
- Soil; 0.0463 mg/kg soil dw

PARA-MENTH-1-EN-8-OL (CAS: 98-55-5)

DNEL
No DNEL available.

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

PNEC

- STP; 2.6 mg/l
- Sediment (Freshwater); 1.85 mg/kg
- Sediment (Marinewater); 0.185 mg/kg
- Soil; 0.329 mg/kg

CITRONELLOL (CAS: 106-22-9)

DNEL

Workers - Inhalation; Long term systemic effects: 161.6 mg/m³
Workers - Inhalation; Long term local effects: 10 mg/m³
Workers - Inhalation; Short term Acute: 10 mg/m³
Workers - Dermal; Long term systemic effects: 327.4 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 47.8 mg/m³
General population - Inhalation; Long term local effects: 10 mg/m³
General population - Inhalation; Short term Acute: 10 mg/m³
General population - Dermal; Long term systemic effects: 196.4 mg/kg bw/day
General population - Dermal; Short term local effects, Acute: 2.950 mg/cm²
Workers - Dermal; Short term Acute, local effects: 2.950 mg/cm²
General population - Oral; Long term systemic effects: 13.8 mg/kg bw/day

PNEC

- Fresh water; 0.0024 mg/l
- Marine water; 0.00024 mg/l
- Intermittent release; 0.024 mg/l
- STP; 580 mg/l
- Sediment (Freshwater); 0.0256 mg/kg sediment dw
- Sediment (Marinewater); 0.00256 mg/kg sediment dw
- Soil; 0.00371 mg/kg soil dw

Nerol (CAS: 106-25-2)

DNEL

Workers - Inhalation; Long term systemic effects: 5.4 mg/m³
Workers - Dermal; Long term systemic effects: 0.76 mg/kg bw/day
Workers - Dermal; Long term local effects: 0.133 mg/cm²
General population - Inhalation; Long term systemic effects: 1.3 mg/m³
General population - Dermal; Long term systemic effects: 0.38 mg/kg bw/day
General population - Oral; Long term systemic effects: 0.38 mg/kg bw/day

PNEC

- Fresh water; 0.00745 mg/l
- Marine water; 0.000745 mg/l
- Intermittent release; 0.0745 mg/l
- STP; 12.9 mg/l
- Sediment (Freshwater); 0.133 mg/kg sediment dw
- Sediment (Marinewater); 0.0133 mg/kg sediment dw
- Soil; 0.0223 mg/kg soil dw

CINNAMYL ALCOHOL (CAS: 104-54-1)

DNEL

Workers - Inhalation; Long term systemic effects: 2.277 mg/m³
Workers - Dermal; Long term systemic effects: 1.998 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 0.5665 mg/m³
General population - Dermal; Long term systemic effects: 0.4926 mg/kg bw/day
General population - Oral; Long term systemic effects: 3.995 mg/kg bw/day

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

PNEC

- Fresh water; 0.109 mg/l
- Marine water; 0.0109 mg/l
- Intermittent release; 1.09 mg/l
- STP; 16.127 mg/l
- Sediment (Freshwater); 220.188 mg/kg sediment dw
- Sediment (Marinewater); 220.188 mg/kg sediment dw
- Soil; 0.185 mg/kg soil dw

Decanal (CAS: 112-31-2)

DNEL

Workers - Inhalation; Long term systemic effects: 24.9 mg/m³
Workers - Dermal; Long term systemic effects: 7 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 6.1 mg/m³
General population - Dermal; Long term systemic effects: 3.5 mg/kg bw/day
General population - Oral; Long term systemic effects: 3.5 mg/kg bw/day

PNEC

- Fresh water; 0.00117 mg/l
- Marine water; 0.000117 mg/l
- Intermittent release; 0.0117 mg/l
- STP; 3.16 mg/l
- Sediment (Freshwater); 0.0972 mg/kg sediment dw
- Sediment (Marinewater); 0.00972 mg/kg sediment dw
- Soil; 0.0187 mg/kg soil dw

BENZYL VIOLET 4B (CAS: 1694-09-3)

DNEL

No DNEL available.

PNEC

No PNEC available.

Octanal (CAS: 124-13-0)

DNEL

Workers - Inhalation; Long term systemic effects: 1.3 mg/m³
Workers - Dermal; Long term systemic effects: 0.37 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 0.32 mg/m³
General population - Dermal; Long term systemic effects: 0.19 mg/kg bw/day
General population - Oral; Long term systemic effects: 0.19 mg/kg bw/day

PNEC

- Fresh water; 0.00154 mg/l
- Marine water; 0.000154 mg/l
- STP; 3.16 mg/l
- Sediment (Freshwater); 0.07146 mg/kg sediment dw
- Sediment (Marinewater); 0.00715 mg/kg sediment dw
- Soil; 0.01339 mg/kg soil dw

4-(2,6,-TRIMETHYLCYCLOHEX-1-ENE-1-YL)-BUT-3-ENE-2-ONE (CAS: 14901-07-6)

DNEL

Workers - Inhalation; Long term systemic effects: 23.21 mg/m³
Workers - Dermal; Long term systemic effects: 13.17 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 5.72 mg/m³
General population - Dermal; Long term systemic effects: 6.58 mg/kg bw/day
General population - Oral; Long term systemic effects: 3.29 mg/kg bw/day

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

PNEC

- Fresh water; 0.004146 mg/l
- Marine water; 0.0004146 mg/l
- Intermittent release; 0.04146 mg/l
- STP; 0.698 mg/l
- Sediment (Freshwater); 63.23 mg/kg sediment dw
- Sediment (Marinewater); 63.23 mg/kg sediment dw
- Soil; 29.47 mg/kg soil dw

BENZYLOXYMETHANOL (CAS: 14548-60-8)

DNEL No DNEL available.

PNEC No PNEC available.

8.2. Exposure controls

Protective equipment

Appropriate engineering controls Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection Wear chemical splash goggles. Contact lenses should not be worn when working with this chemical.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: In case of intensive contact, wear protective gloves (EN 374). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. protective gloves shall be replaced immediately when physically damaged or worn. Appropriate Material - Butyl, Material Thickness - 0.6 to 0.8mm, Breakthrough Time - 8Hrs

Other skin and body protection Wear apron or protective clothing in case of contact.

Hygiene measures Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Coloured liquid.

Colour Blue.

Odour Alcoholic. Perfume.

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

pH	6.5 to 8.5
Melting point	Below minus 20°C
Initial boiling point and range	Approximately 94°C @ 760 mm Hg
Flash point	36°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 6.0 % v/v METHANOL IN AIR Upper flammable/explosive limit: 36.5% v/v METHANOL in AIR
Relative density	0.955-0.970 g/ml @ 20°C
Solubility(ies)	Completely soluble in water. Very soluble in the following materials: Alcohols.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 240.0 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Thermal decomposition or combustion products may include the following substances: Acrid smoke or fumes. Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,218.52

Acute toxicity - dermal

ATE dermal (mg/kg) 4,061.74

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 40.62

General information To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Inhalation	Harmful: possible risk of irreversible effects through inhalation. Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness. Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.
Ingestion	Harmful: possible risk of irreversible effects if swallowed. May cause nausea, headache, dizziness and intoxication. Ingestion of large amounts may cause headaches, nausea, vomiting, abdominal pain, drowsiness and unconciousness. Methanol can cause blindness when ingested.
Skin contact	Harmful: possible risk of irreversible effects in contact with skin. Contains components which may penetrate the skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking. May cause allergic contact eczema.
Eye contact	May cause temporary eye irritation.
Acute and chronic health hazards	Not expected to be a health hazard when used under normal conditions. Risk of long-term effects is considered to be minimal from exposure to concentrations below the level of OEL. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: Central and/or peripheral nervous system damage. Brain damage.
Route of entry	Inhalation Ingestion. Skin absorption
Target organs	Central nervous system Eyes Gastro-intestinal tract Kidneys Liver Respiratory system, lungs Blood
Medical symptoms	Symptoms following overexposure may include the following: Nausea, vomiting. Severe stomach pain. Central nervous system depression. Blindness. Unconsciousness, possibly death.
Medical considerations	Irritation of eyes and mucous membranes. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Visual disturbances, including blurred vision.

Toxicological information on ingredients.

METHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,628.0
Species	Rat
Notes (oral LD_{50})	Toxic if swallowed.
ATE oral (mg/kg)	300.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	15,800.0
Species	Rabbit
Notes (dermal LD_{50})	Toxic in contact with skin.
ATE dermal (mg/kg)	1,000.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	83.2

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Species	Rat
Notes (inhalation LC_{50})	Toxic if inhaled.
ATE inhalation (vapours mg/l)	10.0

Skin corrosion/irritation

Animal data	Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Not irritating.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	This substance has no evidence of mutagenic properties. Negative.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility	Fertility: - NOAEC 1.3 mg/l, , Rat Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Causes damage to organs .
Target organs	Central nervous system Optic Nerve (Nervus Opticus)

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

Inhalation	Toxic by inhalation. Possible effects include headache, dizziness, cramp, nausea, vomiting, blindness, unconsciousness and death. Danger of very serious irriversible effects.
Ingestion	Toxic if swallowed. Possible effects include headache, dizziness, nausea, vomiting, cramp, blindness, unconsciousness and death. There is danger of very serious and irriversible effects if swallawed.
Skin contact	Toxic in contact with skin. Danger of serious irreversible effects.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

METHANOL

Acute toxicity - fish	LC50, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 10000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable but it must not be discharged into drains without permission from the authorities. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

Ecological information on ingredients.

METHANOL

Biodegradation	The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

METHANOL

Bioaccumulative potential	Not potentially bioaccumulative
Partition coefficient	: -0.77

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

METHANOL

Mobility	The product is soluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

METHANOL

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Other adverse effects Not applicable.

Ecological information on ingredients.

METHANOL

Other adverse effects Do not allow material to contaminate ground water system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. The packaging must be empty (drop-free when inverted).

Disposal methods Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels

14.4. Packing group

ADR/RID packing group III

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

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

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

National regulations	Control of Pollution (Special Waste) Regulations 1980 (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). 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 (as amended).
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	HS&E Manager.
Revision date	11/01/2016
Revision	4

POLYGARD SCREENWASH (ARCTIC) CONCENTRATE (-20°C)

Supersedes date	27/05/2015
SDS number	10010
SDS status	Approved.
Risk phrases in full	R10 Flammable. R11 Highly flammable. R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. R36 Irritating to eyes. R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H370 Causes damage to organs (Central nervous system, Optic Nerve (Nervus Opticus)). H370 Causes damage to organs .