

Polyethylene glycol 8000 Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 2/12/2019 Version: 1.0

| SECTION 4. Identification of the substant | a mixture and of the company | | |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------|--|
| SECTION 1: Identification of the substance 1.1. Product identifier | e/mixture and of the company | /undertaking | |
| | Substance | | |
| | : Polyethylene glycol 8000 | | |
| | : Poly(oxy-1,2-ethanediyl),.alphahydroomegahydroxy- Ethane-1,2-diol, ethoxylated | | |
| | 500-038-2 | | |
| | 25322-68-3 | | |
| | 90023123 | | |
| | (C2H4O)nH2O | | |
| 1.2. Relevant identified uses of the substance | | nst | |
| 1.2.1. Relevant identified uses | . | | |
| | Industrial use,Professional use | | |
| | For professional use only | | |
| | Industrial Laboratory use. | | |
| | , | | |
| 1.2.2. Uses advised against No additional information available | | | |
| 1.3. Details of the supplier of the safety data s | heet | | |
| Supplier | | | |
| Scafell Organics | | | |
| Molekula Ltd | | | |
| Lingfield Way | | | |
| Darlington - England T +44 (0) 1949 823777 / +44 (0) 7590 545705 | | | |
| info@molekula.com / kbowen@molekula.com - www.m | <u>olekula.com</u> | | |
| 1.4. Emergency telephone number | | | |
| Emergency number : +44 | l (0) 7590 545705 | | |
| | | | |
| SECTION 2: Hazards identification | | | |
| 2.1. Classification of the substance or mixture | | | |
| Classification according to Regulation (EC) No. 127 | 2/2008 [CLP] | | |
| Not classified | | | |
| Adverse physicochemical, human health and enviro | nmental effects | | |
| No additional information available | | | |
| 2.2. Label elements | | | |
| Not classified. | | | |
| 2.3. Other hazards | | | |
| This substance/mixture does not meet the PBT criteria | of REACH regulation, annex XIII | | |
| This substance/mixture does not meet the vPvB criteria | 0 | | |
| | 0 | | |
| SECTION 3: Composition/information on | ingredients | | |
| 3.1. Substances | | | |
| Name | Product identifier | % | |
| Polyethylene glycol 8000 | (CAS-No.) 25322-68-3 | 100 | |
| r oryethylene grycor oooo | (EC-No.) 500-038-2 | 100 | |
| 3.2. Mixtures | | | |
| Not applicable | | | |
| | | | |
| SECTION 4: First aid measures | | | |
| 4.1. Description of first aid measures | | | |
| First-aid measures general | If possible show this sheet, if not availab | ble show packaging or label. If you feel unwell, seek | |

| 4.1. Description of mat did medsures | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures general | : If possible show this sheet, if not available show packaging or label. If you feel unwell, seek medical advice. Do not leave affected person unattended. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : If skin irritation or rash occurs: Rinse skin with water/shower. Do not remove clothing if it sticks to the skin. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |

Polyethylene glycol 8000 Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| First-aid measures after ingestion | : Rinse mouth out with water. Do not induce vomiting. Do not give an unconscious person anything to drink. |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 4.2. Most important symptoms and ef | fects, both acute and delayed |
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/effects after inhalation | : Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. |
| Symptoms/effects after skin contact | : Dust may cause irritation in skin folds or by contact in combination with tight clothing. |
| Symptoms/effects after eye contact | : Dust from this product may cause eye irritation. redness, itching, tears. |
| Symptoms/effects after ingestion | : May cause irritation to the digestive tract. |
| 4.3. Indication of any immediate medi | cal attention and special treatment needed |

Treat symptomatically.

| SECTION 5: Firefighting measures | |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.1. Extinguishing media | |
| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |
| 5.2. Special hazards arising from the substa | ince or mixture |
| Hazardous decomposition products in case of fire | : Carbon oxides (CO, CO2). |
| 5.3. Advice for firefighters | |
| Precautionary measures fire | : Keep container tightly closed and away from heat, sparks and flame. Exposure to fire/heat: seal off low-lying areas. |
| Firefighting instructions | : Do not enter fire area without proper protective equipment, including respiratory protection. Evacuate area. Use water spray or fog for cooling exposed containers. Use extinguishing agent suitable for surrounding fire. |
| Protection during firefighting | : Use self-contained breathing apparatus and chemically protective clothing. |
| Other information | : Warn all persons of toxic hazard. |
| | |

| SECTION 6: Accidental release measures | | | |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 6.1. Personal precautions, protective equipment and emergency procedures | | | |
| General measures | : No flames, no sparks. Eliminate all sources of ignition. Isolate from fire, if possible, without unnecessary risk. Avoid dust formation. | | |
| 6.1.1. For non-emergency personnel | | | |
| Protective equipment | : Wear recommended personal protective equipment. | | |
| Emergency procedures | : Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Avoid contact with skin, eyes and clothing. Do not touch or walk on the spilled product. | | |
| Measures in case of dust release | : Keep upwind. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc). | | |
| 6.1.2. For emergency responders | | | |
| Protective equipment | : Use self-contained breathing apparatus and chemically protective clothing. | | |
| Emergency procedures | : Stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. | | |
| 6.2. Environmental precautions | | | |
| Avoid release to the environment. | | | |
| 6.3. Methods and material for containment | nt and cleaning up | | |
| Methods for cleaning up | : On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials. | | |
| 0.4 Defenses to athen excitence | | | |

6.4. Reference to other sections See Heading 8. Exposure controls and personal protection.

| SECTION 7: Handling and storage 7.1. Precautions for safe handling | |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | : Does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice and that precautions are taken to avoid the inhalation of dust. Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. |
| Hygiene measures | : Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| 7.2. Conditions for safe storage, including an | |
| Storage conditions | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. |

Polyethylene glycol 8000

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| Incompatible products | : Oxidising agents. |
|--------------------------|--------------------------------------------------------------------------------------------------|
| Incompatible materials | : Direct sunlight. Heat sources. |
| Storage area | : Store at ambient temperature. Store in dry protected location to prevent any moisture contact. |
| 7.3. Specific end use(s) | |

No additional information available

| SECTION 8: Exposure controls/personal protection 8.1. Control parameters | | | |
|-----------------------------------------------------------------------------|--------------------------|--|--|
| Polyethylene glycol 8000 (25322-68-3) | | | |
| | | | |
| DNEL/DMEL (Workers) | | | |
| Long-term - systemic effects, dermal | 112 mg/kg bodyweight/day | | |
| Long-term - systemic effects, inhalation | 40.2 mg/m ³ | | |
| DNEL/DMEL (General population) | | | |
| Long-term - systemic effects,oral | 40 mg/kg bodyweight/day | | |
| Long-term - systemic effects, inhalation | 7.14 mg/m ³ | | |
| Long-term - systemic effects, dermal | 40 mg/kg bodyweight/day | | |
| PNEC (Water) | | | |
| PNEC aqua (freshwater) | 273 mg/l | | |
| PNEC aqua (marine water) | 27.3 mg/l | | |
| PNEC aqua (intermittent, freshwater) | 1 mg/l | | |
| PNEC aqua (intermittent, marine water) | 100 µg/L | | |
| PNEC (Soil) | | | |
| PNEC soil | 46.4 mg/kg dwt | | |
| 8.2. Exposure controls | | | |

Appropriate engineering controls:

Ensure exposure is below occupational exposure limits (where available). Ensure that there is a suitable ventilation system. Handle in accordance with good industrial hygiene and safety procedures.

Personal protective equipment:

Avoid all unnecessary exposure. Wear recommended personal protective equipment.

| Hand protection: | | | | | | | |
|-------------------------------------------------|----------------------|---------------------------------------------------------|------------------------------------------------------|-----------------------------|----------------|----------------------------------|--|
| The protective gloves hands after handling t | | ust comply w | ith the specifications o | f the regulation 2016/425 | and the result | tant standard EN 374. Always v | |
| Туре | Material | Material Permeation Thickness (mm) Penetration Standard | | | | | |
| Disposable gloves | Nitrile rubber (NBR) | | 6 (> 480 minutes) | 0.11 | | EN 374 | |
| Eye protection: | | | | | | | |
| Emergency eye wash designed to protect ag | | | ble in the immediate v | cinity of any potential exp | oosure. Use ey | ye protection according to EN 1 | |
| Туре | | Use | | Characteristics | | Standard | |
| Safety glasses | Dust | | | With side shields | | EN 166 | |
| Skin and body prote | ction: | | | | | | |
| | | | n the immediate vicinit ish all protective clothi | | re. Keep suita | ble chemically resistant protect | |
| Туре | | | | Standard | | | |
| Long sleeved protective clothing | | EN ISO 13982 | | | | | |
| Respiratory protecti | on: | | | | | | |
| In case of insufficient | ventilation, we | ar suitable re | espiratory equipment. | No respiratory protection | needed under | normal use conditions | |
| Device | | Filter type | | Condition | | Standard | |
| Dust mask | | Type P1 | | Dust protection | | EN 14387 | |

Polyethylene glycol 8000 Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information:

Do not eat, drink or smoke during use.

| SECTION 9: Physical and chemical | |
|------------------------------------------------------------|-----------------------------------|
| 9.1. Information on basic physical and c Physical state | : Solid |
| Appearance | : White crystal flakes or powder. |
| Colour | : White to off white. |
| Odour | : No data available. |
| Odour threshold | : No data available |
| pH | : No data available |
| • | : No data available |
| Relative evaporation rate (butylacetate=1) | |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |
| 9.2. Other information | |

No additional information available

| 0.1. Reactivity | |
|---------------------------------------------------------------------------------------------|---------------------------------------------|
| he product is non-reactive under normal conditions of use, storage and transport. | |
| 0.2. Chemical stability | |
| table under recommended handling and storage conditions (see section 7). | |
| 0.3. Possibility of hazardous reactions | |
| o dangerous reactions known under normal conditions of use. | |
| 0.4. Conditions to avoid | |
| eep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smokin | g. Protect from moisture. |
| 0.5. Incompatible materials | |
| xidising agents. | |
| 0.6. Hazardous decomposition products | |
| nder normal conditions of storage and use, hazardous decomposition products should not be | produced. Thermal decomposition generates : |
| arbon oxides (CO, CO2). | |
| | |

| 11.1. Information on toxicological effe | ects |
|-----------------------------------------|--------------------------------------------------------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Serious eye damage/irritation | : Not classified |
| 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 |
| | |

Polyethylene glycol 8000 Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| 5 5 () | 5 () |
|-----------------------------------------------------|---------------------------------------------------------------------|
| Carcinogenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| 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 |
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |
| | |

| SECTION 12: Ecological information | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--|
| 12.1. Toxicity | | |
| Acute aquatic toxicity : | Not classified | |
| Chronic aquatic toxicity : | Not classified | |
| 12.2. Persistence and degradability | | |
| Polyethylene glycol 8000 (25322-68-3) | | |
| Persistence and degradability | No data available. | |
| 12.3. Bioaccumulative potential | | |
| Polyethylene glycol 8000 (25322-68-3) | | |
| | | |
| Bioaccumulative potential | Not potentially bioaccumulable. | |
| 12.4. Mobility in soil | Not potentially bioaccumulable. | |
| · . | Not potentially bioaccumulable. | |
| 12.4. Mobility in soil | Not potentially bioaccumulable. | |
| 12.4. Mobility in soil No additional information available | Not potentially bioaccumulable. | |
| 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment | | |
| 12.4. Mobility in soilNo additional information available12.5. Results of PBT and vPvB assessmentPolyethylene glycol 8000 (25322-68-3) | of REACH regulation, annex XIII | |
| 12.4. Mobility in soil No additional information available 12.5. Results of PBT and vPvB assessment Polyethylene glycol 8000 (25322-68-3) This substance/mixture does not meet the PBT criteria | of REACH regulation, annex XIII | |

| SECTION 13: Disposal considerations | |
|--------------------------------------------|---------------------------------------------------------------------------|
| 13.1. Waste treatment methods | |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | : Avoid release to the environment. |

| ADR | IMDG | ΙΑΤΑ | ADN | RID | |
|-------------------------------|---------------|---------------|---------------|---------------|--|
| | INIDO | | ADN | | |
| I4.1. UN number | | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated | |
| 14.2. UN proper shipping name | | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated | |
| 14.3. Transport hazard | class(es) | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated | |
| 14.4. Packing group | | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated | |
| 14.5. Environmental ha | zards | | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated | |

Polyethylene glycol 8000

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Polyethylene glycol 8000 is not on the REACH Candidate List Polyethylene glycol 8000 is not on the REACH Annex XIV List Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

| SECTION 16: Other information | | |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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. | |

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