

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Micro 4

Product no.

301

Unique formula identifier (UFI)

EVRW-8JUC-6A9H-QTSF

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

Relevant identified uses of the substance or mixture

Cleaning liquid

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Blue & Green AB

Stenorsvägen 52

261 44 Landskrona

Sweden

+46 418 399000

www.blueandgreen.se

E-mail

info@blueandgreen.se

Revision

30/03/2022

SDS Version

1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.

Skin Corr. 1; H314, Causes severe skin burns and eye damage.

Eye Dam. 1; H318, Causes serious eye damage.

STOT RE 1; H372, Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s)





Signal word

Danger

Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

May be fatal if swallowed and enters airways. (H304)

Causes damage to organs through prolonged or repeated exposure. (H372)

Safety statement(s)

General

Keep out of reach of children. (P102)

Prevention

Do not breathe vapour/mist. (P260)

Do not eat, drink or smoke when using this product. (P270)

Response

Get medical advice/attention if you feel unwell. (P314)

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)

Storage

-

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501)

Hazardous substances

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

1-Heptanol, 2-propyl-, 5EO

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides sodium hydroxide

2.3. Other hazards

Additional labelling

Not applicable

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

SECTION 3: Composition/information on ingredients

| 27 | NЛI | vtı | IPAC |
|------|-----|------|-------|
| 3.2. | IVI | IALU | 11 63 |
| | | | |

| Product/substance | Identifiers | % w/w | Classification | No |
|--|-------------------------|--------|---|----|
| Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, | CAS No.: | 10-15% | EUH066 Asp. Tox. 1, H304 | |
| aromatics (2-25%) | EC No.: 919-164-8 | | STOT RE 1, H372 | |
| | REACH: 01-2119473977-17 | | Aquatic Chronic 3, H412 | |
| | Index No.: | | | |
| | | | | |
| 1-Heptanol, 2-propyl- , 5EO | CAS No.: 160875-66-1 | 5-10% | Eye Dam. 1, H318 | |
| | EC No.: 605-233-7 | | | |
| | REACH: | | | |
| | Index No.: | | | |
| | ITIUCA IVO | | | |
| 2-Ethylhexanol, ethoxylated | CAS No.: 26468-86-0 | 5-10% | Eye Irrit. 2, H319 | |
| | EC No.: 607-943-2 | | | |
| | REACH: | | | |
| | Index No.: | | | |
| | ITIUEX IVU | | | |
| Quaternary ammonium compounds, C12-14- | CAS No.: 1554325-20-0 | 3-5% | Acute Tox. 4, H302 Skin Irrit. 2, H315 | |

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| alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides | EC No.: 810-152-7 REACH: Index No.: | | Eye Dam. 1, H318 | |
|---|--|------|---|--|
| 2-(2-butoxyethoxy)ethanol | CAS No.: 112-34-5 EC No.: 203-961-6 REACH: 01-2119475104-44 Index No.: 603-096-00-8 | 1-3% | Eye Irrit. 2, H319 | |
| Alcohols C12-14, ethoxylated 3EO | CAS No.: 68439-50-9 EC No.: 932-106-6 REACH: Index No.: | 1-3% | Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412 | |
| propan-2-ol | CAS No.: 67-63-0 EC No.: 200-661-7 REACH: Index No.: 603-117-00-0 | 1-3% | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 | |
| sodium hydroxide | CAS No.: 1310-73-2 EC No.: 215-185-5 REACH: Index No.: 011-002-00-6 | <1% | Met. Corr. 1, H290 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Corr. 1A, H314 Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Dam. 1, H318 Eye Irrit. 2, H319 (SCL: 0.50 %) | |
| Amides, C12-18, N-[3- (dimethylamino)propyl], N- oxides | CAS No.: 1471314-81-4 EC No.: 939-581-9 REACH: 01-2119978229-22 Index No.: | <1% | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412 | |

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available. **Other information**

[1] European occupational exposure limit

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

Labelling of contents according to Detergents Regulation (EC) No 648/2004

15% - 30%

· Non-ionic surfactants

5% - 15%

 $\cdot\, \text{Aromatic hydrocarbons}$

< 5%

· Cationic surfactants

SECTION 4: First aid measures

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4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER / doctor.

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

Burns

Not applicable

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

This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.



Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Room temperature 18 to 23°C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-(2-butoxyethoxy)ethanol

Long term exposure limit (8 hours) (ppm): 10

Long term exposure limit (8 hours) (mg/m³): 67,5

Short term exposure limit (15 minutes) (ppm): 15

Short term exposure limit (15 minutes) (mg/m³): 101,2

propan-2-ol

Long term exposure limit (8 hours) (ppm): 400

Long term exposure limit (8 hours) (mg/m³): 999

Short term exposure limit (15 minutes) (ppm): 500

Short term exposure limit (15 minutes) (mg/m³): 1250

sodium hydroxide

Short term exposure limit (15 minutes) (mg/m³): 2

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

Product/substance 2-(2-butoxyethoxy)ethanol

DNEL 67.5 mg/m³ Inhalation Route of exposure

Duration Long term - Local effects - Workers

Product/substance 2-(2-butoxyethoxy)ethanol

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DNEL 6,25 mg/kg bw/day

Route of exposure Oral

Duration Long term – Systemic effects - General population

Product/substance 2-(2-butoxyethoxy)ethanol

DNEL 101.2 mg/m³ Route of exposure Inhalation

Duration Short term – Local effects - Workers

Product/substance propan-2-ol

DNEL 319 mg/kg bw/day

Route of exposure Dermal

Duration Long term – Systemic effects - General population

Product/substance propan-2-ol

DNEL 89 mg/m³ Route of exposure Inhalation

Duration Long term – Systemic effects - General population

Product/substance propan-2-ol

DNEL 26 mg/kg bw/day

Route of exposure Oral

Duration Long term – Systemic effects - General population

Product/substance propan-2-ol
DNEL 888 mg/kg bw/day

Route of exposure Dermal

Duration Long term – Systemic effects - Workers

Product/substance propan-2-ol DNEL 500 mg/m³

Route of exposure Inhalation

Duration Long term – Systemic effects - Workers

Product/substance sodium hydroxide

DNEL 1 mg/m3
Route of exposure Inhalation

Duration Long term – Local effects - General population

Product/substance sodium hydroxide

DNEL 1 mg/m3
Route of exposure Inhalation

Duration Long term – Local effects - Workers

Product/substance sodium hydroxide
DNEL 2 mg/kg bw/d

Route of exposure Dermal

Duration Short term – Local effects - Workers

Product/substance sodium hydroxide

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| | DNEL | 2 mg/m3 |
|-------|---|---|
| | Route of exposure | Inhalation |
| | Duration | Short term – Local effects - Workers |
| | Duration | Short term Local effects Workers |
| | Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| | DNEL | 3.52 mg/m ³ |
| | Route of exposure | Inhalation |
| | Duration | Long term – Systemic effects - Workers |
| | | |
| | Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| | DNEL | 5 mg/kg bw/day |
| | Route of exposure | Dermal |
| | Duration | Long term – Systemic effects - Workers |
| | Due de et les de et en en | Auridea C42.40 N F2 (diseable dessire a) annual N auridea |
| | Product/substance DNEL | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides 0.87 mg/m³ |
| | | Inhalation |
| | Route of exposure Duration | Long term – Systemic effects - General population |
| | Duration | Long term – Systemic effects - General population |
| | Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| | DNEL | 2.5 mg/kg bw/day |
| | Route of exposure | Dermal |
| | Duration | Long term – Systemic effects - General population |
| | | |
| | Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| | DNEL | 0.05 mg/kg bw/day |
| | Route of exposure | Oral |
| | Duration | Long term – Systemic effects - General population |
| DNIEC | | |
| PNEC | | |
| | Product/substance | 2-(2-butoxyethoxy)ethanol |
| | PNEC | 0.44 mg/kg dw |
| | Route of exposure | Marine water sediment |
| | Duration of Exposure | |
| | Product/substance | 2-(2-butoxyethoxy)ethanol |
| | PNEC | 4.4 mg/kg dw |
| | Route of exposure | Freshwater sediment |
| | Duration of Exposure | |
| | | |
| | Product/substance | 2-(2-butoxyethoxy)ethanol |
| | PNEC | 1.1 mg/L Freshwater |
| | Route of exposure Duration of Exposure | Freshwater |
| | buration of exposure | |
| | Product/substance | 2-(2-butoxyethoxy)ethanol |
| | PNEC | 0.11 mg/L |
| | Route of exposure | Marine water |
| | Duration of Exposure | |
| | | |

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| Product/substance PNEC | 2-(2-butoxyethoxy)ethanol 11 mg/L |
|---|---|
| Route of exposure Duration of Exposure | Intermittent release |
| Product/substance | 2-(2-butoxyethoxy)ethanol |
| PNEC | 0.32 mg/kg dw |
| Route of exposure Duration of Exposure | Soil |
| Product/substance | propan-2-ol |
| PNEC | 552 mg/kg |
| Route of exposure Duration of Exposure | Marine water sediment |
| Product/substance | propan-2-ol |
| PNEC | 140.9 mg/L |
| Route of exposure Duration of Exposure | Freshwater |
| Product/substance | propan-2-ol |
| PNEC | 28 mg/kg |
| Route of exposure Duration of Exposure | Soil |
| Product/substance | propan-2-ol |
| PNEC | 140.9 mg/L |
| Route of exposure Duration of Exposure | Marine water |
| Product/substance | propan-2-ol |
| PNEC | 140.9 mg/L |
| Route of exposure Duration of Exposure | Intermittent release |
| Product/substance | propan-2-ol |
| PNEC | 2251 mg/L |
| Route of exposure Duration of Exposure | Sewage treatment plant |
| Product/substance | propan-2-ol |
| PNEC | 552 mg/kg |
| Route of exposure Duration of Exposure | Freshwater sediment |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| PNEC | 30.3 µg/L |
| Route of exposure | Freshwater |

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| Product/substance PNEC | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
|---------------------------|---|--|
| Route of exposure | Marine water | |
| Duration of Exposure | | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
| PNEC | 6.8 μg/L | |
| Route of exposure | Intermittent release | |
| Duration of Exposure | | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
| PNEC | 0.214 mg/kg dw | |
| Route of exposure | Freshwater sediment | |
| Duration of Exposure | | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
| PNEC | 0.021 mg/kg dw | |
| Route of exposure | Marine water sediment | |
| Duration of Exposure | | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
| PNEC | 0.000025 mg/kg dw | |
| Route of exposure | Soil | |
| Duration of Exposure | | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides | |
| PNEC | 9.7 mg/L | |
| Route of exposure | Sewage treatment plant | |
| Duration of Exposure | | |

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Wash contaminated clothing before reuse.

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Use only CE marked protective equipment.

Respiratory Equipment

| Type | Class | Colour | Standards |
|------|-------|--------|-----------|
| S/SL | P2 | White | EN149 |



Skin protection

| Recommended | Type/Category | Standards |
|--|---------------|-----------|
| Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product. | - | - |



Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards | |
|----------|-------------------------|--------------------------|----------------------------|--|
| Nitrile | - | > 480 | EN374-2, EN374-3, EN388 | |



Eye protection

| Type | Standards |
|-----------------------------------|-----------|
| Safety glasses with side shields. | EN166 |



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold

Solvent

pН

12.9

Density (g/cm³)

0.99

Kinematic viscosity

Testing not relevant or not possible due to nature of the product.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Relative vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

Flash point (°C)

>65

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Soluble

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (q/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

Other physical and chemical parameters

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Product/substance Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Test method

Species Rat
Route of exposure Oral
Test LD50

Result >5000 mg/kg

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| Other information | |
|-------------------------------|--|
| Product/substance Test method | Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |
| Species | Rat |
| Route of exposure | Inhalation |
| Test | LC50 (4 hours) |
| Result | >13,1 mg/L |
| Other information | · |
| Product/substance | Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |
| Test method | D.I.I. |
| Species | Rabbit |
| Route of exposure | Dermal |
| Test | LD50 |
| Result | >2000 mg/kg |
| Other information | |
| Product/substance | 1-Heptanol, 2-propyl- , 5EO |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | >2000 mg/kg |
| Other information | |
| Product/substance | 2-Ethylhexanol, ethoxylated |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | >2000 mg/kg |
| Other information | |
| Product/substance | Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlo |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | >300-2000 mg/kg |
| Other information | |
| Product/substance | 2-(2-butoxyethoxy)ethanol |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | >2000 mg/kg |
| Other information | |
| | |

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Test method

Rabbit **Species** Route of exposure Dermal LD50 Test Result 2764 mg/kg

Other information

Product/substance

2-(2-butoxyethoxy)ethanol

Test method

Species Rat Inhalation Route of exposure LC50 Test >29 ppm Result

Other information

Product/substance

2-(2-butoxyethoxy)ethanol

Test method

Species Mouse Route of exposure Oral Test LD50 2410 mg/kg Result

Other information

Product/substance Test method

Alcohols C12-14, ethoxylated 3EO

Species

Rat Route of exposure Oral Test LD50 Result >2000 mg/kg

Other information

Product/substance

Alcohols C12-14, ethoxylated 3EO

Test method

Rabbit **Species** Dermal Route of exposure LD50 Test >2000 mg/kg Result

Other information

Product/substance propan-2-ol Test method **OECD 401** Species Rat Route of exposure Oral LD50 Test Result 5840 mg/kg

Other information

Product/substance propan-2-ol Test method **OECD 403** Species Rat Route of exposure Inhalation

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Test LC50 Result >25 mg/L

Other information

Product/substance propan-2-ol
Test method OECD 402
Species Rabbit
Route of exposure Dermal
Test LD50
Result 13900 mg/kg

Other information

Product/substance

sodium hydroxide

Test method

Species Rat
Route of exposure Oral
Test LD50

Result 325 mg/kgbw

Other information

Product/substance

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Rat
Route of exposure Oral
Test LD50

Result 500-1000 mg/kg

Other information

Product/substance Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Rat
Route of exposure Dermal
Test LD50
Result >2000 mg/kg

Other information

Skin corrosion/irritation

Product/substance 2-(2-butoxyethoxy)ethanol

Test method OECD 404 Species Rabbit

Duration

Result No adverse effect observed (Not irritating)

Other information

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance 2-(2-butoxyethoxy)ethanol

Test method OECD 404 Species Rabbit

Duration

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Result Adverse effect observed (Irritating)

Other information

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance 2-(2-butoxyethoxy)ethanol

Test method OECD 406 Species Guinea pig

Result No adverse effect observed (not sensitising)

Other information

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Long term effects

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

No special

Other information

propan-2-ol has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Test method

Species Fish, Oncorhynchus mykiss

Compartment

Duration 96 hours
Test LC50
Result 10-30 mg/L

Other information

Product/substance Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Test method

Species Algae, Pseudokirchneriella subcapitata

Compartment

Duration 72 hours
Test EC50

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| Result | 10-100 mg/L |
|-------------------|--|
| Other information | |
| Product/substance | Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |
| Test method | |
| Species | Daphnia, Daphnia magna |
| Compartment | |
| Duration | 48 hours |
| Test | EC50 |
| Result | 10-22 mg/L |
| Other information | |
| Product/substance | 1-Heptanol, 2-propyl- , 5EO |
| Test method | |
| Species | Fish, Oncorhynchus mykiss |
| Compartment | |
| Duration | 96 hours |
| Test | LC50 |
| Result | 10-100 mg/L |
| Other information | |
| Product/substance | 1-Heptanol, 2-propyl- , 5EO |
| Test method | |
| Species | Daphnia, Daphnia magna |
| Compartment | |
| Duration | 48 hours |
| Test | EC50 |
| Result | 10-100 mg/L |
| Other information | |
| Product/substance | 2-Ethylhexanol, ethoxylated |
| Test method | |
| Species | Fish, Oncorhynchus mykiss |
| Compartment | |
| Duration | 96 hours |
| Test | LC50 |
| Result | 10-100 mg/L |
| Other information | |
| Product/substance | 2-Ethylhexanol, ethoxylated |
| Test method | |
| Species | Daphnia, Daphnia magna |
| Compartment | |
| Duration | 48 hours |
| Test | EC50 |
| Result | 1-10 mg/L |
| Other information | |
| Product/substance | 2-Ethylhexanol, ethoxylated |
| Test method | |
| Species | Algae, Scenedesmus subspicatus |

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Compartment

Duration 72 hours
Test EC50
Result 1-10 mg/L

Other information

Product/substance

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides

Test method

Species Fish

Compartment

Duration 96 hours
Test LC50
Result 10-100 mg/L

Other information

Product/substance

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides

Test method

Species Daphnia, Daphnia magna

Compartment

Duration 48 hours
Test EC50
Result 1-10 mg/L

Other information

Product/substance

Test method

Algae

Species Compartment

Duration 72 hours
Test EC50
Result 1-10 mg/L

Other information

Product/substance 2-(2-butoxyethoxy)ethanol

Test method

Species Fish, Leuciscus idus

Compartment

Duration 96 hours
Test LC50
Result >100 mg/L

Other information

Product/substance 2-(2-butoxyethoxy)ethanol

Test method

Species Algae, Scenedesmus subspicatus

Compartment

Duration 96 hours
Test EC50
Result >100 mg/L

Other information

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2-(2-butoxyethoxy)ethanol

Alcohols C12-14, ethoxylated 3EO

Alcohols C12-14, ethoxylated 3EO

Daphnia, Daphnia magna

Product/substance

Test method

Species Daphnia, Daphnia magna

Compartment

48 hours Duration Test EC50 >100 mg/L Result

Other information

Product/substance

Test method

Species

Compartment

48 hours Duration Test EC50 Result 0.1-1 mg/L

Other information

Product/substance

Test method

Fish, Brachydanio rerio Species

Compartment

96 hours Duration Test LC50 Result 0.1-1 mg/L

Other information

Product/substance Test method

Alcohols C12-14, ethoxylated 3EO

Species

Algae, Desmodesmus subspicatus

Compartment

72 hours Duration Test EC50 0.1-1 mg/L Result

Other information

Product/substance

propan-2-ol

Test method

Species Fish

Compartment

Duration 96 hours LC50 Test >100 mg/L Result

Other information

Product/substance

propan-2-ol

Test method

Species Algae

Compartment

Duration 8 d

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Test LOEC
Result 1000 mg/L
Other information

Product/substance

Test method

Species Daphnia, Daphnia magna

Compartment

Duration 48 hours
Test LC50
Result >100 mg/L

Other information

Product/substance

propan-2-ol

propan-2-ol

Test method

Species

Algae

Compartment

Duration 72 hours
Test EC50
Result >100 mg/L

Other information

Product/substance sodium hydroxide

Test method

Species Fish

Compartment

Duration 96 hours
Test LC50
Result 125 mg/L

Other information

Product/substance sodium hydroxide

Test method

Species Daphnia

Compartment

Duration 48 hours
Test EC50
Result 40 mg/L

Other information

Product/substance Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Fish, Oncorhynchus mykiss

Compartment

Duration 96 hours
Test LC50
Result 0.68 mg/L

Other information

Product/substance Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

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Species

Daphnia, Daphnia magna

Compartment

Duration 48 hours EC50 Test Result 19.9 mg/L

Other information

Product/substance

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Algae, Pseudokirchneriella subcapitata

Compartment

72 hours Duration Test ErC50 0.705 mg/L Result

Other information

Product/substance

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Algae, Pseudokirchneriella subcapitata

Compartment

Duration 72 hours Test NOEC 0.303 mg/L Result

Other information

Product/substance

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Test method

Species Daphnia, Daphnia magna

Compartment

Duration 21 days NOEC Test Result 0.7 mg/L

Other information

Product/substance Test method

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Species

Fish, Pimephales promelas

Compartment

302 d Duration Test NOEC 0.42 mg/L Result

Other information

12.2. Persistence and degradability

Product/substance Biodegradable

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Test method Result

Product/substance 1-Heptanol, 2-propyl-, 5EO

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Biodegradable

Yes

Test method

OECD 301 D

Result

Product/substance

2-Ethylhexanol, ethoxylated

Biodegradable

Yes

Test method

OECD 301 B

Result

>60%

Product/substance

Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlorides

Biodegradable

Yes

Test method

Result

OECD 301 D

Product/substance

2-(2-butoxyethoxy)ethanol

Biodegradable

Yes

Test method Result

OECD 301 E 100%

Product/substance

Alcohols C12-14, ethoxylated 3EO

Biodegradable

Test method

OECD 301 B

Result

>60%

Product/substance

propan-2-ol

Yes

Biodegradable Test method

Result

Product/substance Biodegradable

sodium hydroxide

Test method

Yes

Result

Product/substance Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

Biodegradable

Yes

Test method OECD 301 B

Result

75%

12.3. Bioaccumulative potential

Product/substance

1-Heptanol, 2-propyl-, 5EO

Test method

Potential

No

bioaccumulation

No data available LogPow No data available BCF

Other information

Product/substance

2-Ethylhexanol, ethoxylated

Test method

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| Potential | No |
|---------------------------|--|
| bioaccumulation | |
| LogPow | No data available |
| BCF | No data available |
| Other information | |
| | |
| Product/substance | Quaternary ammonium compounds, C12-14-alkyl(hydroxyethyl)dimethyl, ethoxylated, chlo |
| Test method | N |
| Potential bioaccumulation | No |
| LogPow | No data available |
| BCF | No data available |
| Other information | NO data available |
| Other information | |
| Product/substance | 2-(2-butoxyethoxy)ethanol |
| Test method | |
| Potential | No |
| bioaccumulation | |
| LogPow | 1.0000 |
| BCF | No data available |
| Other information | |
| Product/substance | Alcohols C12-14, ethoxylated 3EO |
| Test method | |
| Potential | No |
| bioaccumulation | |
| LogPow | No data available |
| BCF | No data available |
| Other information | |
| Product/substance | propan-2-ol |
| Test method | ρι ο ρατι-2-οι |
| Potential | No |
| bioaccumulation | INO |
| LogPow | 0.0500 |
| BCF | No data available |
| Other information | |
| | |
| Product/substance | sodium hydroxide |
| Test method | |
| Potential | No |
| bioaccumulation | |
| LogPow | No data available |
| BCF | No data available |
| Other information | |
| Product/substance | Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides |
| Test method | 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 |
| Potential | No |
| bioaccumulation | |
| | No data available |

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BCF No data available

Other information

12.4. Mobility in soil

Amides, C12-18, N-[3-(dimethylamino)propyl], N-oxides

LogKoc = 1.54, High mobility potential.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

No special

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

To the extent the material has not been subject to regular tests of peroxide formation the waste shall be treated as explosive waste.

HP 8 - Corrosive

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

07 06 04* Other organic solvents, washing liquids and mother liquors

Specific labelling

Not applicable

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

| N 14: T | ransport ir | nformation | | | | |
|---------|-----------------|---|---|-------------|---------------|--|
| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) | 14.4 PG* | 14.5 Env** | Other information |
| ADR | UN1760 | CORROSIVE LIQUID, N.O.S. (sodium hydroxide) | Class: 8 Labels: 8 Classification code: C9 | III | No | Limited quantities: L Tunnel restriction code: (E) See below for additional information. |
| IMDG | UN1760 | CORROSIVE LIQUID, N.O.S. (sodium hydroxide) | Class: 8 Labels: 8 Classification code: C9 | III | No | Limited quantities: L EmS: F-A S-B See below for additional information. |
| IATA | UN1760 | CORROSIVE LIQUID, N.O.S. (sodium hydroxide) | Class: 8 Labels: 8 Classification code: C9 | III | No | See below for additional information. |

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| 14.1 UN / | 14.2 UN proper shipping name | 14.3 Hazard | 14.4 | 14.5 | Other information |
|-----------|------------------------------|-------------|------|-------|-------------------|
| ID | | class(es) | PG* | Env** | |



- * Packing group
- ** Environmental hazards

Additional information

IMDG / See the Dangerous Goods List, section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

The surfactant(s) contained in this preparation 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.

Tactile warning.

If this product is sold in retail, it must be delivered with child-resistant fastening.

Sources

The Management of Health and Safety at Work Regulations 1999

The Health and Safety at Work etc. Act 1974 Regulations 2013.

 $Regulation \ (EC)\ No\ 648/2004\ of\ the\ European\ Parliament\ and\ of\ the\ Council\ of\ 31\ March\ 2004\ on\ detergents.$

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

CLP Regulation (EC) No 1272/2008, as retained and amended in UK law.

EC-Regulation 1907/2006 (REACH), as amended by UK REACH Regulations SI 2019/758

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.

H225, Highly flammable liquid and vapour.

H290, May be corrosive to metals.

H302, Harmful if swallowed.

H304, May be fatal if swallowed and enters airways.

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H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H336, May cause drowsiness or dizziness.

H372, Causes damage to organs through prolonged or repeated exposure.

H400, Very toxic to aquatic life.

H412, Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the

Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The classification of the substance/mixture in regard of skin corrosion and serious eye damage is based on the pH-criterion given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Åsa Möller

Other



A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en

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