

SAFETY DATA SHEET

HYLINE HLU 30

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

1.1. Product identifier

Trade name

HYLINE HLU 30

Product no.

72204, 72223, 72248

Unique formula identifier (UFI)

YQN1-30S5-S00R-2TXN

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

Relevant identified uses of the substance or mixture

Alkaline dishwashing liquid with chlorine

Use descriptors (UK REACH)

| Sectors of use | Description |
|--------------------------------|--|
| LCS "IS" | Industrial uses: Uses of substances as such or in preparations at industrial sites |
| LCS "PW" | Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Product category | Description |
| PC35 | Washing and Cleaning Products (including solvent based products) |
| Process category | Description |
| PROC2 | Use in closed, continuous process with occasional controlled exposure |
| Environmental release category | Description |
| ERC8a | Wide dispersive indoor use of processing aids in open systems |

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

HOBART GmbH
Robert-Bosch-Strasse 17
DE-77656 Offenburg
Germany

E-mail

hyline@hobart.de

Revision

07/02/2023

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

Met. Corr. 1; H290, May be corrosive to metals.

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

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

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)
 Causes severe skin burns and eye damage. (H314)
 Harmful to aquatic life with long lasting effects. (H412)

Safety statement(s)

General

-

Prevention

Wear eye protection/protective gloves/protective clothing. (P280)
 Avoid release to the environment. (P273)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. (P303+P361+P353)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing. (P305+P351+P338)
 Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

-

Hazardous substances

Potassium Hydroxide
 Sodium hydroxide
 Sodium hypochlorite

Additional labelling

UFI: YQN1-30S5-S00R-2TXN

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
 This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

| Product/substance | Identifiers | % w/w | Classification | Note |
|-------------------------------------|---|---------|---|------|
| Potassium Hydroxide | CAS No.: 1310-58-3 EC No.: 215-181-3 UK-REACH: Index No.: 019-002-00-8 | 5 -15 % | Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 (SCL: 2.00 %) Skin Corr. 1A, H314 Skin Irrit. 2, H315 (SCL: 0.50 %) Eye Irrit. 2, H319 (SCL: 0.50 %) | |
| Disodium metasilicate, pentahydrate | CAS No.: 10213-79-3 EC No.: 229-912-9 UK-REACH: Index No.: | 5 -15 % | Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 | |
| Sodium hydroxide | CAS No.: 1310-73-2 EC No.: 215-185-5 UK-REACH: Index No.: | 1 - 5 % | 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 (SCL: 2.00 %) Eye Irrit. 2, H319 (SCL: 0.50 %) | |
| Sodium hypochlorite | CAS No.: 7681-52-9 EC No.: 231-668-3 | 1 - 5 % | EUH031 Met. Corr. 1, H290 | |

UK-REACH:
Index No.: 017-011-00-1

Skin Corr. 1B, H314
Eye Dam. 1, H318
Aquatic Acute 1, H400 (M=10)
Aquatic Chronic 1, H410 (M=1)

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

Other information

-

Labelling of contents according to Detergents Regulation (EC) No 648/2004 as retained and amended in UK law

5% - 15%

· Phosphates

< 5%

· Chlorine-based bleaching Agents

· Phosphonates

· Polycarboxylates

SECTION 4: First aid measures

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

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

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 30 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

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

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

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

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Some metal oxides

Oxygen, hypochlorous acid, chlorine.

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.

Hazchem Code: 2R

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. In the event of leakage to the surroundings, contact local environmental authorities.

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.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

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

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

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

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

Store in a container with a resistant inner liner.

Recommended storage material

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

Storage temperature

-15 - 35 °C

Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

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

Potassium Hydroxide

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

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

2-Phosphonobutan-1,2,4-tricarboxylic acid

| Duration | Route of exposure | DNEL |
|--|--------------------------|-----------------------|
| Long term – Systemic effects - General population | Dermal | 2.1 mg/kg bw/day |
| Long term – Systemic effects - Workers | Dermal | 4.2 mg/kg bw/day |
| Short term – Systemic effects - General population | Dermal | 40 mg/kg bw/day |
| Short term – Systemic effects - Workers | Dermal | 80 mg/kg bw/day |
| Long term – Systemic effects - General population | Inhalation | 3.7 mg/m ³ |
| Long term – Systemic effects - Workers | Inhalation | 15 mg/m ³ |
| Short term – Systemic effects - General population | Inhalation | 79 mg/m ³ |
| Short term – Systemic effects - Workers | Inhalation | 158 mg/m ³ |
| Long term – Systemic effects - General population | Oral | 2.1 mg/kg bw/day |
| Short term – Systemic effects - General population | Oral | 65 mg/kg bw/day |

Potassium Hydroxide

| Duration | Route of exposure | DNEL |
|--|--------------------------|---------------------|
| Long term – Local effects - General population | Inhalation | 1 mg/m ³ |
| Long term – Local effects - Workers | Inhalation | 1 mg/m ³ |

Potassium tripolyphosphate

| Duration | Route of exposure | DNEL |
|---|--------------------------|------------------------|
| Long term – Systemic effects - General population | Inhalation | 1.45 mg/m ³ |
| Long term – Systemic effects - Workers | Inhalation | 5.88 mg/m ³ |
| Long term – Systemic effects - General population | Oral | 70 mg/kg bw/day |

Sodium hydroxide

| Duration | Route of exposure | DNEL |
|---|--------------------------|---------------------|
| Short term – Local effects - General population | Dermal | 2 % |
| Long term – Local effects - General population | Inhalation | 1 mg/m ³ |
| Long term – Local effects - Workers | Inhalation | 1 mg/m ³ |

Sodium hypochlorite

| Duration | Route of exposure | DNEL |
|--|--------------------------|------------------------|
| Long term – Local effects - General population | Inhalation | 1.55 mg/m ³ |
| Long term – Local effects - Workers | Inhalation | 1.55 mg/m ³ |
| Long term – Systemic effects - General population | Inhalation | 1.55 mg/m ³ |
| Long term – Systemic effects - Workers | Inhalation | 1.55 mg/m ³ |
| Short term – Local effects - General population | Inhalation | 3.1 mg/m ³ |
| Short term – Local effects - Workers | Inhalation | 3.1 mg/m ³ |
| Short term – Systemic effects - General population | Inhalation | 3.1 mg/m ³ |
| Short term – Systemic effects - Workers | Inhalation | 3.1 mg/m ³ |
| Long term – Systemic effects - General population | Oral | 260 µg/kgbw/day |

PNEC

2-Phosphonobutan-1,2,4-tricarboxylic acid

| Route of exposure | Duration of Exposure | PNEC |
|-----------------------------------|-----------------------------|-------------|
| Freshwater | | 666 µg/L |
| Freshwater sediment | | 2.398 mg/kg |
| Intermittent release (freshwater) | | 10.42 mg/L |
| Marine water | | 66 µg/L |
| Marine water sediment | | 239.8 µg/kg |
| Sewage treatment plant | | 50.4 mg/L |
| Soil | | 88.56 µg/kg |

Sodium hypochlorite

| Route of exposure | Duration of Exposure | PNEC |
|-----------------------------------|----------------------|------------|
| Freshwater | | 210 ng/L |
| Intermittent release (freshwater) | | 260 ng/L |
| Marine water | | 42 ng/L |
| Predators | | 11.1 mg/kg |
| Sewage treatment plant | | 4.69 mg/L |

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 eyewash and emergency 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.

8.3. Individual protection measures, such as personal protective equipment


Generally

Use only UKCA marked protective equipment.


Respiratory Equipment

| Type | Class | Colour | Standards | |
|--|-------|--------|-------------|---|
| In case of inadequate ventilation use suitable respirator - B/P2 | | | EN143/EN149 |  |


Skin protection

| Recommended | Type/Category | Standards | |
|---|---------------|-----------|---|
| Dedicated work clothing should be worn. | - | - |  |

Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards | |
|---|----------------------|--------------------------|-----------|---|
| Butyl rubber (≥0,4 mm). Neoprene (≥0,5 mm). Nitrile rubber (≥0,7 mm). | ≥ 0,4 - 0,7 | ≥ 480 | EN374 |  |

Eye protection

| Type | Standards | |
|----------------|-----------|---|
| Safety glasses | EN166 |  |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Yellowish

Odour / Odour threshold

Chlorine

pH

> 13

pH in solution

~ 11,5 (0,2 %)

Density (g/cm³)

~1,25

Kinematic viscosity

< 30 mPas

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

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

Vapour pressure

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

Relative vapour density

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

Decomposition temperature (°C)

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

Data on fire and explosion hazards

Flash point (°C)

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

Ignition (°C)

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

Auto flammability (°C)

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

Lower and upper explosion limit (% v/v)

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

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient

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

Solubility in fat (g/L)

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

9.2. Other information

VOC (g/l)

0

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Contact with acids liberates toxic gas.

Reacts violently with alkali metals, metal powders, oxidizing materials and amines.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Protect from sunlight. Do not expose to temperatures exceeding 20 °C/68 °F.

10.5. Incompatible materials

Strong acids, alkali metals, metal powders, oxidizing materials and amines. Contact with metals can result in decomposition with the formation of oxygen.

10.6. Hazardous decomposition products
Oxygen, hypochlorous acid, chlorine.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

| | |
|-------------------|---------------------|
| Product/substance | Potassium Hydroxide |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | 333 mg/kg |
| Other information | |

| | |
|-------------------|-------------------------------------|
| Product/substance | Disodium metasilicate, pentahydrate |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | 1152 -1349 mg/kg |
| Other information | |

| | |
|-------------------|-------------------------------------|
| Product/substance | Disodium metasilicate, pentahydrate |
| Test method | |
| Species | Rat |
| Route of exposure | Inhalation |
| Test | LC50 |
| Result | > 2,06 g/m ³ |
| Other information | |

| | |
|-------------------|-------------------------------------|
| Product/substance | Disodium metasilicate, pentahydrate |
| Test method | |
| Species | |
| Route of exposure | Dermal |
| Test | LD50 |
| Result | > 5000 mg/kg |
| Other information | |

| | |
|-------------------|----------------------------|
| Product/substance | Potassium tripolyphosphate |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | > 2000 mg/kg |
| Other information | |

| | |
|-------------------|---------------------|
| Product/substance | Sodium hypochlorite |
| Test method | OECD 401 |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | 1100 mg/kg |
| Other information | |

| | |
|-------------------|---------------------|
| Product/substance | Sodium hypochlorite |
| Test method | OECD 403 |
| Species | Rat |
| Route of exposure | Inhalation |
| Test | LC50 |
| Result | > 10,5 mg/l |
| Other information | |

| | |
|-------------------|---------------------|
| Product/substance | Sodium hypochlorite |
| Test method | OECD 402 |
| Species | Rabbit |
| Route of exposure | Dermal |
| Test | LD50 |

| | |
|--|---|
| Result | > 20000 mg/kg |
| Other information | |
| Product/substance | Polyacrylic acid sodium salt |
| Test method | OECD 401 |
| Species | Rat |
| Route of exposure | |
| Test | LD50 |
| Result | >5000 mg/kg bw/day |
| Other information | |
| Product/substance | Polyacrylic acid sodium salt |
| Test method | |
| Species | Rabbit |
| Route of exposure | |
| Test | LD50 |
| Result | >5000 mg/kg bw/day |
| Other information | |
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | |
| Species | Rat |
| Route of exposure | Oral |
| Test | LD50 |
| Result | > 6500 mg/kg |
| Other information | |
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | |
| Species | Rat |
| Route of exposure | Dermal |
| Test | LD50 |
| Result | > 4000 mg/kg |
| Other information | |
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | |
| Species | Rat |
| Route of exposure | Inhalation |
| Test | LC50 |
| Result | > 1979 mg/m ³ |
| Other information | |
| Skin corrosion/irritation | |
| Product/substance | Sodium hydroxide |
| Test method | |
| Species | |
| Duration | No data available. |
| Result | Adverse effect observed (Corrosive) |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | |
| Species | |
| Duration | No data available. |
| Result | Adverse effect observed (Corrosive) |
| Other information | |
| Causes severe skin burns and eye damage. | |
| Serious eye damage/irritation | |
| Product/substance | Sodium hydroxide |
| Test method | |
| Species | |
| Duration | No data available. |
| Result | Adverse effect observed (Causes serious eye damage) |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | |

| | |
|-------------------|---|
| Species | |
| Duration | No data available. |
| Result | Adverse effect observed (Causes serious eye damage) |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | |
| Species | |
| Duration | No data available. |
| 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

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

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

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

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.

Endocrine disrupting properties

No evidence for endocrine disrupting properties.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|-------------------------------|
| Product/substance | Potassium Hydroxide |
| Test method | LC50 |
| Species | Fish, <i>Gambusia affinis</i> |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | 80 mg/l |
| Other information | |

| | |
|-------------------|-------------------------------------|
| Product/substance | Disodium metasilicate, pentahydrate |
| Test method | |
| Species | Fish, <i>Brachydanio rerio</i> |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | 210 mg/l |
| Other information | |

| | |
|-------------------|-------------------------------------|
| Product/substance | Disodium metasilicate, pentahydrate |
| Test method | EC50 |
| Species | Crustacean, <i>Daphnia magna</i> |
| Compartment | |
| Duration | No data available. |
| Test | |

| | |
|-------------------|--|
| Result | 1700 mg/l |
| Other information | |
| Product/substance | Potassium tripolyphosphate |
| Test method | LC0 |
| Species | Fish, Golden Orfey |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | ~ 800 mg/l |
| Other information | |
| Product/substance | Sodium hydroxide |
| Test method | LC50 |
| Species | Fish |
| Compartment | |
| Duration | 96 hours |
| Test | |
| Result | 35 - 189 mg/l |
| Other information | |
| Product/substance | Sodium hydroxide |
| Test method | EC50 |
| Species | Crustacean, Ceriodaphnia dubia |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | 40,4 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | |
| Species | Bacteria |
| Compartment | |
| Duration | 3 hours |
| Test | |
| Result | > 3 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | LC50 |
| Species | Fish, Oncorhynchus mykiss |
| Compartment | |
| Duration | 96 hours |
| Test | |
| Result | 0,06 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | LC50 |
| Species | Fish, Oncorhynchus mykiss |
| Compartment | |
| Duration | 96 hours |
| Test | |
| Result | 0,032 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | NOEC |
| Species | Fish, Menidia peninsulae |
| Compartment | |
| Duration | 28 days |
| Test | |
| Result | 0,04 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | |
| Species | Algae, Pseudokirchneriella subcapitata |

| | |
|-------------------|-----------------------------------|
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | 0,04 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | |
| Species | Algae, Myriophyllum spicatum |
| Compartment | |
| Duration | 96 hours |
| Test | |
| Result | 0,1 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | OECD 202 |
| Species | Crustacean, Daphnia magna |
| Compartment | |
| Duration | 48 hours |
| Test | |
| Result | 0,141 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | OECD 202 |
| Species | Crustacean, Ceriodaphnia dubia |
| Compartment | |
| Duration | 48 hours |
| Test | |
| Result | 0,035 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | EC50 |
| Species | Crustacean, Crassostrea virginica |
| Compartment | |
| Duration | 48 hours |
| Test | |
| Result | 0,026 mg/l |
| Other information | |
| Product/substance | Sodium hypochlorite |
| Test method | NOEC |
| Species | Crustacean, Crassostrea virginica |
| Compartment | |
| Duration | 14 days |
| Test | |
| Result | 0,007 mg/l |
| Other information | |
| Product/substance | Polyacrylic acid sodium salt |
| Test method | DIN 38412 |
| Species | Leuciscus idus |
| Compartment | |
| Duration | |
| Test | LC50 |
| Result | >100 mg/L |
| Other information | |
| Product/substance | Polyacrylic acid sodium salt |
| Test method | |
| Species | Algae, Selenastrum capricornutum |
| Compartment | |
| Duration | |
| Test | LC50 |
| Result | >100 mg/L |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | OECD 204 |
| Species | Fish, Danio rerio |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | > 500 mg/l |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | OECD 204 |
| Species | Fish, Danio rerio |
| Compartment | |
| Duration | 14 days |
| Test | |
| Result | > 500 mg/l |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | EC50 |
| Species | Algae, Desmodesmus subspicatus |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | > 500 mg/l |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | EC10 |
| Species | Algae, Desmodesmus subspicatus |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | > 16,65 < 32,75 mg/l |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | OECD 202 |
| Species | Crustacean, Daphnia magna |
| Compartment | |
| Duration | No data available. |
| Test | |
| Result | > 535,5 mg/l |
| Other information | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Test method | OECD 211 |
| Species | Crustacean, Daphnia magna |
| Compartment | |
| Duration | 21 days |
| Test | |
| Result | 52 mg/l |
| Other information | |

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

The product is easily biodegradable.

| | |
|-------------------|---------------------|
| Product/substance | Sodium hypochlorite |
| Biodegradable | Yes |
| Test method | |
| Result | |

| | |
|-------------------|---|
| Product/substance | 2-Phosphonobutan-1,2,4-tricarboxylic acid |
| Biodegradable | Yes |
| Test method | OECD 301 A |
| Result | 30 - 40 % |

12.3. Bioaccumulative potential

The product is not bioaccumulating

12.4. Mobility in soil

No data available.

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 evidence for endocrine disrupting properties.

12.7. Other adverse effects

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

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 8 – Corrosive

HP 14 – Ecotoxic

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

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

07 06 01* Aqueous 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.

Dispose unused product and the packaging in accordance with local requirements.

SECTION 14: Transport information

| | 14.1 UN / ID | 14.2 UN proper shipping name | 14.3 Hazard class(es) Labels: 8 Classification code: C5 | 14.4 PG* | 14.5 Env** | Other information |
|------|-------------------------|--|--|---------------------|-----------------------|---|
| ADR | UN1719 | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium Hydroxide, Sodium hypochlorite) | Class: 8 Labels: 8 Classification code: C5  | II | No | Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information. |
| IMDG | UN1719 | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium Hydroxide, Sodium hypochlorite) | Class: 8 Labels: 8 Classification code: C5  | II | No | Limited quantities: 1 L EmS: F-A S-B See below for additional information. |
| IATA | UN1719 | CAUSTIC ALKALI LIQUID, N.O.S. (Potassium Hydroxide, Sodium hypochlorite) | Class: 8 Labels: 8 Classification code: C5  | II | No | See below for additional information. |

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See 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.

Hazchem Code: 2R

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

Restricted to professional users.

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

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

The Management of Health and Safety at Work Regulations 1999.

Regulation (EC) No 648/2004 on detergents as retained and amended in UK law.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H314, Contact with acids liberates toxic gas.

H290, May be corrosive to metals.

H302, Harmful if swallowed.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H335, May cause respiratory irritation.

H400, Very toxic to aquatic life.

H410, Very toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC2 = Use in closed, continuous process with occasional controlled exposure

PC35 = Washing and Cleaning Products (including solvent based products)

ERC8a = Wide dispersive indoor use of processing aids in open systems

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
UVBC = Unknown or variable composition, complex reaction products or of biological materials
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) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by

JUBO

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