

## SAFETY DATA SHEET

# Hyline HLA 40

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

#### 1.1. Product identifier

**Trade name**

Hyline HLA 40

**Product no.**

72205, 72224

**Unique formula identifier (UFI)**

2X80-201G-8009-NTRH

#### 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

**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
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
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**

08/02/2023

**SDS Version**

2.0

**Date of previous version**

12/01/2023 (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

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

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

#### 2.2. Label elements

Hazard pictogram(s)



#### Signal word

Danger

#### Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

#### Safety statement(s)

##### General

-

##### Prevention

Wear eye protection/protective gloves/protective clothing. (P280)

##### 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

Disodium metasilicate, pentahydrate

#### Additional labelling

UFI: 2X80-201G-8009-NTRH

### 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 %)	
Potassium silicate	CAS No.: 1312-76-1 EC No.: 215-199-1 UK-REACH: Index No.:	5 - 15 %	Skin Irrit. 2, H315 Eye Irrit. 2, H319	
Disodium metasilicate, pentahydrate	CAS No.: 10213-79-3 EC No.: 229-912-9 UK-REACH: Index No.:	1 - 5 %	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	
Sodium carbonate	CAS No.: 497-19-8 EC No.: 207-838-8 UK-REACH: Index No.: 011-005-00-2	1 - 5 %	Eye Irrit. 2, H319	

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%

- Amphoteric surfactants

- 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

### 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.

### 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

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.

#### Recommended storage material

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

#### Storage temperature

-10 - 35 °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

Potassium 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/m³
Long term – Systemic effects - Workers	Inhalation	15 mg/m³
Short term – Systemic effects - General population	Inhalation	79 mg/m³
Short term – Systemic effects - Workers	Inhalation	158 mg/m³
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

2-Propenoic acid, homopolymer

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	200 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	560 µg/kgbw/day
Long term – Systemic effects - General population	Inhalation	348 µg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	1.97 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	200 µg/kgbw/day
<b>Pentasodium triphosphate</b>		
<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	375 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	375 µg/kgbw/day
Short term – Systemic effects - General population	Dermal	375 µg/kgbw/day
Short term – Systemic effects - Workers	Dermal	375 µg/kgbw/day
Long term – Systemic effects - General population	Inhalation	661 µg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	661 µg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	660 µg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	661 µg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	750 µg/kgbw/day
Short term – Systemic effects - General population	Oral	750 µg/kgbw/day
<b>Potassium Hydroxide</b>		
<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Local effects - General population	Inhalation	1 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	1 mg/m <sup>3</sup>
<b>Potassium silicate</b>		
<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	740 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	1.49 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	1.38 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	5.61 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	740 µg/kgbw/day
<b>Sodium Capryliminodipropionat</b>		
<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	8.3 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	13.9 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	29 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	97.8 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	8.3 mg/kg bw/day
<b>Sodium carbonate</b>		
<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Local effects - General population	Inhalation	5 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	10 mg/m <sup>3</sup>
<b>▼ PNEC</b>		
<b>2-Phosphonobutan-1,2,4-tricarboxylic acid</b>		
<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
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
<b>2-Propenoic acid, homopolymer</b>		
<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater		3 µg/L
Freshwater sediment		20.7 µg/kg
Intermittent release (freshwater)		1.3 µg/L
Intermittent release (marine water)		130 ng/L
Marine water		300 ng/L
Marine water sediment		2.07 µg/kg
Sewage treatment plant		900 µg/L
Soil		3.117 µg/kg
<b>Pentasodium triphosphate</b>		
<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater		5 µg/L
Freshwater sediment		190 µg/kg
Intermittent release (freshwater)		50 µg/L
Marine water		5 µg/L
Soil		140 µg/kg
<b>Potassium silicate</b>		
<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater		7.5 mg/L
Intermittent release (freshwater)		7.5 mg/L
Marine water		1 mg/L
Sewage treatment plant		348 mg/L
<b>Sodium Capryliminodipropionat</b>		
<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater		481 µg/L
Freshwater sediment		5.92 mg/kg
Intermittent release (freshwater)		1 mg/L
Marine water		48.1 µg/L
Marine water sediment		592 µg/kg
Sewage treatment plant		2.46 mg/L
Soil		901 µg/kg

## 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
No special when used as intended.			


#### 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

Colourless

#### Odour / Odour threshold

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

#### pH

> 13

#### pH in solution

~ 10,5 (0,3%)

#### Density (g/cm³)

~ 1,30

#### 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

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

##### 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

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

None known.

#### 10.4. Conditions to avoid

None known.

#### 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 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	Potassium silicate
Test method:	
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 5000 mg/kg bw
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/m3
Other information:	
Product/substance	Disodium metasilicate, pentahydrate
Test method:	
Species:	
Route of exposure:	Dermal
Test:	LD50
Result:	> 5000 mg/kg
Other information:	
Product/substance	Sodium carbonate
Test method:	
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2800 mg/kg
Other information:	
Product/substance	Sodium carbonate
Test method:	
Species:	Guinea pig
Route of exposure:	Inhalation
Test:	LC50
Result:	0,8 mg/l
Other information:	
Product/substance	Sodium carbonate
Test method:	
Species:	Mouse
Route of exposure:	Inhalation
Test:	LC50
Result:	1,2 mg/l
Other information:	
Product/substance	Sodium carbonate
Test method:	
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	2,3 mg/l
Other information:	
Product/substance	Sodium carbonate
Test method:	
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	> 2000 mg/kg
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/m3  
Other information:

Product/substance Sodium Capryliminodipropionat  
Test method:  
Species: Rat  
Route of exposure: Oral  
Test: LD50  
Result: > 5000 mg/kg  
Other information:

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### ▼ Serious eye damage/irritation

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, *Gambusia affinis*  
Compartment:

Duration:	No data available.
Test:	
Result:	80 mg/l
Other information:	
Product/substance	Potassium silicate
Test method:	LC50
Species:	Fish, <i>Leuciscus idus</i>
Compartment:	
Duration:	48 hours
Test:	
Result:	> 146 mg/l
Other information:	
Product/substance	Potassium silicate
Test method:	EC50
Species:	Crustacean, <i>Daphnia magna</i>
Compartment:	
Duration:	24 hours
Test:	
Result:	> 146 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	Sodium carbonate
Test method:	LC50
Species:	Fish, <i>Lepomis macrochirus</i>
Compartment:	
Duration:	No data available.
Test:	
Result:	300 mg/l
Other information:	
Product/substance	Sodium carbonate
Test method:	EC50
Species:	Crustacean, <i>Ceriodaphnia dubia</i>
Compartment:	
Duration:	No data available.
Test:	
Result:	200 - 227 mg/l
Other information:	
Product/substance	2-Phosphonobutan-1,2,4-tricarboxylic acid
Test method:	OECD 204
Species:	Fish, <i>Danio rerio</i>
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:

Product/substance Sodium Capryliminodipropionat  
 Test method: LC50  
 Species: Fish, Oncorhynchus mykiss  
 Compartment:  
 Duration: No data available.  
 Test:  
 Result: > 100 mg/l  
 Other information:

Product/substance Sodium Capryliminodipropionat  
 Test method: LC50  
 Species: Crustacean, Daphnia magna  
 Compartment:  
 Duration: No data available.  
 Test:  
 Result: > 100 mg/l  
 Other information:

Not classified as dangerous to the environment.

## 12.2. ▼ Persistence and degradability

The product is easily biodegradable.

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

Product/substance Sodium Capryliminodipropionat  
 Biodegradable: Yes  
 Test method: OECD 301 B  
 Result: > 60%

### 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

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

## SECTION 13: Disposal considerations

### Waste treatment methods

Product is covered by the regulations on hazardous 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 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:	14.4 PG*	14.5 Env**	Other information:
ADR	UN1719	CAUSTIC ALKALI LIQUID, N.O.S. (Potassium Hydroxide, Disodium metasilicate, pentahydrate)	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, Disodium metasilicate, pentahydrate)	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, Disodium metasilicate, pentahydrate)	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

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents as retained and amended in UK law. 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.

#### 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

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.

### 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)

PROC9 = Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

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 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