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Skin irritation Category 2  
H315 Causes skin irritation.  
Eye irritation Category 2  
H319 Causes serious eye irritation.

**Reproductive toxicity Category 1B**  
**H360FD May damage fertility. May damage the unborn child.**

### 2.2. Label elements

#### REGULATION (EC) No 1272/2008

Hazard pictograms



Signal word

: **Danger**

Hazard statements

: **H315** Causes skin irritation.  
**H319** Causes serious eye irritation.  
**H360FD** May damage fertility. May damage the unborn child.

Precautionary statements

: **P201** Obtain special instructions before use.  
**P263** Avoid contact during pregnancy and while nursing.  
**P280** Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.  
**P302 + P352** IF ON SKIN: Wash with plenty of water.  
**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P308 + P313** IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label : Sodium tetraborate

### 2.3. Other hazards

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This product is a mixture. Health hazard information is based on its components. Results of PBT and vPvB assessment, see chapter 12.5.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Sodium tetraborate	1330-43-4 005-011-00-4 215-540-4	Repr. 1B; H360FD	$\geq 0,5\%$ - $< 4,5\%$	
Sodium hydroxide	1310-73-2 011-002-00-6 215-185-5	Met. Corr. 1; H290 Skin Corr. 1A; H314	$\geq 0,5\%$ - $< 1\%$	Skin Corr. 1A; H314: $\geq 5\%$ Skin Corr. 1B; H314:2 - $< 5\%$ Eye Irrit. 2; H319:0,5 - $< 2\%$ Skin Irrit. 2; H315:0,5 - $< 2\%$

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

*General advice:*

First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

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*Inhalation:*

If breathed in, move person into fresh air. If symptoms persist, call a physician.

*Skin contact:*

After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.

*Eye contact:*

Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

*Ingestion:*

When swallowed, allow water to be drunk. Rinse mouth. Consult a physician.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

*Suitable extinguishing media:*

Water spray  
Foam  
Dry powder  
Carbon dioxide (CO<sub>2</sub>)

*Extinguishing media which shall not be used for safety reasons:*

High volume water jet

#### 5.2. Special hazards arising from the substance or mixture

Fire may cause evolution of:

Sodium oxides  
Boron oxides

#### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

Do not use a solid water stream as it may scatter and spread fire. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Unprotected persons must be kept away. Provide adequate ventilation. Avoid contact with skin, eyes and clothing.

#### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

#### 6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.  
Pick for disposal in tightly closed containers

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### 6.4. Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

*Advice on safe handling:*

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid exposure - obtain special instructions before use.

*Advice on protection against fire and explosion:*

Normal measures for preventive fire protection.

*Hygiene measures:*

Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.

### 7.2. Conditions for safe storage, including any incompatibilities

*Requirements for storage areas and containers:*

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

no additional data available

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**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits:**

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Sodium tetraborate	EH40 OES TWA	1 mg/m <sup>3</sup>		
Sodium tetraborate	EH40 WEL TWA	1 mg/m <sup>3</sup>		
Sodium hydroxide	EH40 WEL STEL	2 mg/m <sup>3</sup>		
Sodium hydroxide	EH40 WEL			Listed

TWA - Time weighted average  
STEL - Short term exposure limit

**DNEL/ PNEC-Values**

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
Sodium tetraborate	Workers / Long-term systemic effects		6,7 mg/m <sup>3</sup>	Inhalation	
Sodium tetraborate	Workers / Long-term systemic effects		316,4mg/kg bw/d	Dermal	
Sodium tetraborate	Consumers / Long-term systemic effects		3,41 mg/m <sup>3</sup>	Inhalation	
Sodium tetraborate	Consumers / Long-term systemic effects		159,5mg/kg bw/d	Dermal	

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Sodium tetraborate	Consumers / Long-term systemic effects		0,79mg/kg bw/d	Ingestion	
Sodium hydroxide	Workers / Long-term local effects		1 mg/m3	Inhalation	
Sodium hydroxide	Consumers / Long-term local effects		1 mg/m3	Inhalation	

Component	Environmental compartment / Value	Remarks
Sodium tetraborate	Fresh water: 2,9 mg/l	
Sodium tetraborate	Marine water: 2,9 mg/l	
Sodium tetraborate	Sewage treatment plant: 10 mg/l	
Sodium tetraborate	Soil: 5,7 mg/kg dw	

**8.2. Exposure controls**

**Occupational exposure controls**

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

**Personal protective equipment**

*Respiratory protection:*

In the case of vapour formation use a respirator with an approved filter.

*Hand protection:*

Glove material: Natural Latex

Break through time: 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.



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Remarks: Supplementary note: The specifications are based on information and tests from similar substances by analogy.  
Due to varying conditions ( e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.  
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.  
Manufacturer's directions for use should be observed because of great diversity of types .  
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

*Eye protection:*  
Safety goggles

*Skin and body protection:*  
Protective suit

### Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: liquid
Colour	: colourless
Odour	: odourless
Melting point/range	: No data available
Boiling point/boiling range	: 100 °C at 1.013 hPa
Flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available

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Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	Stable under recommended storage conditions.
pH	:	10
Water solubility	:	completely miscible
Vapour pressure	:	No data available
Density	:	No data available

**9.2 Other Information**

Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Viscosity, dynamic	:	No data available

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**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under recommended storage conditions.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4. Conditions to avoid**

None known.

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**10.5. Incompatible materials**

Strong oxidizing agents  
Strong reducing agents  
Strong acids

**10.6. Hazardous decomposition products**

No decomposition if stored and applied as directed.

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

*Acute oral toxicity:*  
No data available

*Acute dermal toxicity:*  
No data available

*Acute inhalation toxicity:*  
No data available

*Skin irritation:*  
Result: Irritating to skin.

*Eye irritation:*  
Result: Irritating to eyes.

*Respiratory or skin sensitisation:*  
No data available

*Carcinogenicity:*  
Note: No data available

*Germ cell mutagenicity:*  
Note: No data available

*Reproductive toxicity:*  
Remarks: Classification based on Annex VI of regulation 1272/2008/EC.

*Aspiration hazard:*

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No data available

**11.2. Information on other hazards**

Endocrine disrupting properties  
No data available

*Other information:*  
No data available

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**SECTION 12: Ecological information**

**12.1. Toxicity**

*Toxicity to fish:*  
No data available

*Toxicity to aquatic plants:*  
No data available

*Toxicity to aquatic invertebrates:*  
No data available

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No data available

**12.6. Endocrine disrupting properties**

No data available

**12.7. Other adverse effects**

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No data available

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**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

*Product:*

Dispose according to legal requirements.

*Packaging:*

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

*Further information:*

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

Regulation No. 1013/2006

For personal protection see section 8.

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**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID:Not dangerous goods    IMDG:Not dangerous goods    IATA:Not dangerous goods

**14.2 UN proper shipping name**

ADR/RID:Not dangerous goods

IMDG:Not dangerous goods

IATA:Not dangerous goods

**14.3 Transport hazard class(es)**

**14.4 Packaging group**

**14.5 Environmental hazards**

ADR/RID:no

Marine pollutant: no

**14.6 Special precautions for user**

No data available

**14.7 Maritime transport in bulk according to IMO instruments**

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No data available

**SECTION 15: Regulatory information**

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1$ % (w/w).
Directive 2012/18/EC		Not applicable

**Poison Control Center**

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145

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Italy	0382 24444	United Kingdom	(+44) 844 892 0111
Germany	Berlin : 030/19240		
	Bonn : 0228/19240		
	Erfurt : 0361/730730		
	Freiburg : 0761/19240		
	Göttingen : 0551/19240		
	Homburg : 06841/19240		
	Mainz : 06131/19240		
	Munich : 089/19240		
Latvia	+37167042473		

**Other inventory information**

US. Toxic Substances Control Act  
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended  
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)  
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List  
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)  
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)  
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)  
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand  
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)

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On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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## SECTION 16: Other information

### Text of H-statements referred to under heading 3

Sodium tetraborate	:	H360FD	May damage fertility. May damage the unborn child.
Sodium hydroxide	:	H290	May be corrosive to metals.
		H314	Causes severe skin burns and eye damage.

### Further information

All directives and regulations refer to amended versions.  
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

#### Abbreviations:

EC European Community  
CAS Chemical Abstracts Service  
DNEL Derived no effect level  
PNEC Predicted no effect level  
vPvB Very persistent and very bioaccumulative substance  
PBT Persistent, bioaccumulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.



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