







## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** No information available.

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

**Specific hazards arising from the chemical** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

**Hazardous combustion products** Carbon oxides. Potassium oxides.

### 5.3. Advice for firefighters

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

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

**Personal precautions** Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information See section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be

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allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

**Storage class (TRGS 510)** LGK 8A.

## 7.3. Specific end use(s)

**Specific use(s)** The identified uses for this product are detailed in Section 1.2.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Potassium hydroxide 1310-58-3	-	TWA: 2 mg/m <sup>3</sup>	-	TWA: 2.0 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Potassium hydroxide 1310-58-3	-	TWA: 1 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Potassium hydroxide 1310-58-3	STEL: 2 mg/m <sup>3</sup>	-	-	TWA: 2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Potassium hydroxide 1310-58-3	STEL: 2 mg/m <sup>3</sup>	-	Ceiling: 2 mg/m <sup>3</sup>	-	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Potassium hydroxide 1310-58-3	-	-	-	Ceiling: 2 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup> STEL: 1 mg/m <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	-	-	STEL: 2 mg/m <sup>3</sup>
Chemical name	Sweden		Switzerland	United Kingdom	
Potassium hydroxide 1310-58-3	NGV: 1 mg/m <sup>3</sup> Bindande KGV: 2 mg/m <sup>3</sup>		TWA: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>	

### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Potassium hydroxide 1310-58-3	-	-	1 mg/m <sup>3</sup> [5] [6]

### Notes

- [4] Systemic health effects.  
 [5] Local health effects.  
 [6] Long term.

### Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Potassium hydroxide	-	-	1 mg/m <sup>3</sup> [5] [6]

Chemical name	Oral	Dermal	Inhalation
1310-58-3			

**Notes**

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.

**Predicted No Effect Concentration (PNEC)****8.2. Exposure controls****Engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**Personal protective equipment****Eye/face protection**

Tight sealing safety goggles. Face protection shield. Eye protection must conform to standard EN 166.

**Hand protection**

Wear suitable gloves. Impervious gloves. Gloves must conform to standard EN 374.

**Skin and body protection**

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**Respiratory protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations**

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls**

Avoid release to the environment.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties****Appearance****Physical state**

Liquid

**Colour**

Clear to Olive green

**Odour**

No information available

**Odour threshold**

No information available

**Property****Values****Remarks • Method****Melting point / freezing point**

No data available

**Initial boiling point and boiling range**

No data available

**Flammability**

No data available

**Flammability Limit in Air****Upper flammability or explosive limits**

No data available

**Lower flammability or explosive limits**

No data available

**Flash point**

> 200 °C

No data available

**Autoignition temperature**

No data available

**Decomposition temperature**

No data available

**pH**

No data available

**pH (as aqueous solution)**

12

solution (1 %)

**Kinematic viscosity**

No data available

**Dynamic viscosity**

No data available

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Water solubility	Soluble in water	No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Vapour pressure		No data available
Relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapour density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

**9.2. Other information**

VOC 0 %

9.2.1. Information with regards to physical hazard classes  
Not applicable

9.2.2. Other safety characteristics  
No information available

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

Reactivity None under normal use conditions.

**10.2. Chemical stability**

Stability Stable under normal conditions.

**Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

**10.4. Conditions to avoid**

Conditions to avoid Exposure to air or moisture over prolonged periods.

**10.5. Incompatible materials**

Incompatible materials Acids. Bases. Oxidising agent.

**10.6. Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure****Product Information****Inhalation**

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

	Pulmonary edema can be fatal.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 3,690.90 mg/kg

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium hydroxide	= 284 mg/kg ( Rat )	-	-

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	On basis of test data. Causes severe skin burns and eye damage. Classification based on individual ingredients of the mixture.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye damage. Causes burns.
<b>Respiratory or skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

#### 11.2.2. Other information

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**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicity

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

#### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
Potassium hydroxide	0.83

### 12.4. Mobility in soil

**Mobility in soil** No information available.

### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Potassium hydroxide 1310-58-3	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### 12.7. Other adverse effects

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**Waste codes / waste designations according to EWC / AVV** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

### IMDG

**14.1 UN number or ID number** UN3267

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<b>14.2 UN proper shipping name</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	II
<b>Description</b>	UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid), 8, II
<b>14.5 Environmental hazards</b>	No
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274
<b>EmS-No.</b>	F-A, S-B
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	No information available

**RID**

<b>14.1 UN number or ID number</b>	UN3267
<b>14.2 UN proper shipping name</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	II
<b>Description</b>	UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid), 8, II
<b>14.5 Environmental hazards</b>	No
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274
<b>Classification code</b>	C7

**ADR**

<b>14.1 UN number or ID number</b>	UN3267
<b>14.2 UN proper shipping name</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	II
<b>Description</b>	UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid), 8, II
<b>14.5 Environmental hazards</b>	No
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274
<b>Classification code</b>	C7
<b>Tunnel restriction code</b>	(E)

**ADN**

<b>14.1 UN/ID no</b>	UN3267
<b>14.2 EPNN</b>	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	II
<b>Description</b>	UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium hydroxide, Octenylsuccinic acid), 8, II
<b>14.5 Environmental hazard</b>	No
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	274
<b>Classification code</b>	C7
<b>Equipment Requirements</b>	PP, EP

**IATA**

<b>14.1 UN number or ID number</b>	UN3267
<b>14.2 UN proper shipping name</b>	Corrosive liquid, basic, organic, n.o.s. (Potassium hydroxide, Octenylsuccinic acid)
<b>14.3 Transport hazard class(es)</b>	8
<b>14.4 Packing group</b>	II
<b>Description</b>	UN3267, Corrosive liquid, basic, organic, n.o.s. (Potassium hydroxide, Octenylsuccinic acid), 8, II
<b>14.5 Environmental hazards</b>	No
<b>14.6 Special Precautions for Users</b>	
<b>Special Provisions</b>	A3, A803

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ERG Code  
Note:

8L  
None

## SECTION 15: Regulatory information

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

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Potassium hydroxide - 1310-58-3	Use restricted. See entry 75.	-

#### Persistent Organic Pollutants

Not applicable

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

#### International Inventories

Contact supplier for inventory compliance status

### 15.2. Chemical safety assessment

#### Chemical Safety Report

No information available

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

#### Legend Section 8: Exposure controls/personal protection

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TWA Ceiling SCBA	TWA (time-weighted average) Maximum limit value Self-contained breathing apparatus	STEL Sk*	STEL (Short Term Exposure Limit) Skin designation
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Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 Environmental Protection Agency  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 U.S. National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
 Organisation for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

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**Revision Note** Initial Release.

**This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006**

#### Disclaimer

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

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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.

**End of Safety Data Sheet**