

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

**POTASSIUM HYDROXIDE FLAKES / BAG 25 KG**

Version 3.1

Print Date 29.08.2012

Revision Date 18.11.2011

**1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name : POTASSIUM HYDROXIDE FLAKES / BAG 25 KG  
Substance name : potassium hydroxide  
Index-No. : 019-002-00-8  
CAS-No. : 1310-58-3  
EC-No. : 215-181-3  
Registration number : 01-2119487136-33-xxxx

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Uses advised against : At this moment we have not identified any uses advised against

**1.3. Details of the supplier of the safety data sheet**

Company : Brenntag Nordic A/S  
Borupvang 5 B  
DK 2750 Ballerup  
Telephone : +45 43 29 28 00  
Telefax : +45 43 29 27 00  
E-mail address : SDS.DK@brenntag-nordic.com  
Responsible/issuing person : Environment & Quality

**1.4. Emergency telephone number**

Emergency telephone number : In case of personal injury call:  
Denmark: 82 12 12 12 Giftlinien, Bispebjerg Hospital  
Finland: Poison Information Centre: (09) 471 977 (direct) or (09) 47 11 (exchange), open 24h/day  
Norway: 22 59 13 00 Giftinformasjonen (døgnåpent)  
Sweden: +46-8-331231 Giftinformationscentralen (24 hour service)  
Outside these countries: Please call your local emergency services

**2. Hazards identification****2.1. Classification of the substance or mixture**

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**Classification according to Regulation (EC) No 1272/2008**

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Corrosive to metals	Category 1	---	H290
Acute toxicity	Category 4	---	H302
Skin corrosion	Category 1A	---	H314

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

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Harmful (Xn)	R22
Corrosive (C)	R35

For the full text of the R-phrases mentioned in this Section, see Section 16.

**Most important adverse effects**

- Human Health : See section 11 for toxicological information.
- Physical and chemical hazards : See section 9 for physicochemical information.
- Potential environmental effects : See section 12 for environmental information.

**2.2. Label elements****Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols :



Signal word : Danger

Hazard statements : H290 May be corrosive to metals.  
H302 Harmful if swallowed.

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H314 Causes severe skin burns and eye damage.

Precautionary statements

Prevention : P260 Do not breathe dust or mist.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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

**Hazardous components which must be listed on the label:**

- potassium hydroxide

**2.3. Other hazards**

For Results of PBT and vPvB assessment see section 12.5.

**3. Composition/information on ingredients**

**3.1. Substances**

Chemical nature : Chemical intermediate

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
<b>potassium hydroxide</b>				
Index-No. : 019-002-00-8	90	Met. Corr.1	H290	Xn; R22 C; R35
CAS-No. : 1310-58-3		Acute Tox.4	H302	
EC-No. : 215-181-3		Skin Corr.1A	H314	
Registration : 01-2119487136-33-xxxx				

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

### 4. First aid measures

#### 4.1. Description of first aid measures

- |                         |  |
|-------------------------|--|
| General advice          | : Take off all contaminated clothing immediately.  |
| If inhaled              | : In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.   |
| In case of skin contact | : Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  |
| In case of eye contact  | : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately. Continue rinsing eyes during transport to hospital.   |
| If swallowed            | : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Call a physician immediately. |

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

- |          |   |
|----------|---|
| Symptoms | : Extremely corrosive and destructive to tissue. See Section 11 for more detailed information on health effects and symptoms.   |
| Effects  | : If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. See Section 11 for more detailed information on health effects and symptoms. |

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

- |           |  |
|-----------|--|
| Treatment | : Treat symptomatically. No further information available. |
|-----------|--|

### 5. Firefighting measures

#### 5.1. Extinguishing media

- |                              |   |
|------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product |
|------------------------------|---|

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Unsuitable extinguishing media : itself does not burn.  
: No information available.

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

Specific hazards during firefighting : Gives off hydrogen by reaction with metals. Risk of explosion.

**5.3. Advice for firefighters**

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

**6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment. Keep away unprotected persons. Avoid dust formation. Avoid contact with skin, eyes and clothing. Do not breathe dust. Contaminated surfaces will be extremely slippery.

**6.2. Environmental precautions**

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

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

Methods and materials for containment and cleaning up : Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Flush with plenty of water.

Further information : Treat recovered material as described in the section "Disposal considerations".

**6.4. Reference to other sections**

See Section 1 for emergency contact information.  
See Section 8 for information on personal protective equipment.  
See Section 13 for waste treatment information.

**7. Handling and storage**

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**7.1. Precautions for safe handling**

Advice on safe handling : Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin and the eyes. Keep container tightly closed. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe dust.

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

Requirements for storage areas and containers : Keep in an area equipped with alkali resistant flooring. Suitable materials for containers: polyethylene containers; Unsuitable materials for containers: Aluminium; Zinc

Advice on protection against fire and explosion : The product is not flammable. Gives off hydrogen by reaction with metals. Risk of explosion.

Further information on storage conditions : Keep container tightly closed and dry. Suitable materials for containers: Keep in a well-ventilated place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

**7.3. Specific end uses**

Specific use(s) : No information available.

**8. Exposure controls/personal protection****8.1. Control parameters****Other Occupational Exposure Limit Values**

(Additional) Information : Contains no substances with occupational exposure limit values.

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**Component: potassium hydroxide****CAS-No.  
1310-58-3****Other Occupational Exposure Limit Values**GV (DK), Ceiling Limit Value:  
2 mg/m<sup>3</sup>**8.2. Exposure controls****Engineering measures**

Refer to protective measures listed in sections 7 and 8.

**Personal protective equipment***Respiratory protection*

Advice : Respirator must be worn if exposed to dust.  
Recommended Filter type:  
Particle filter:P2  
Particle filter:P3

*Hand protection*

Advice : The glove material has to be impermeable and resistant to the product / the substance / the preparation.  
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
The following materials are suitable:  
natural rubber  
polychloroprene  
Nitrile rubber  
Polyvinylchloride  
fluorocarbon rubber  
Protective gloves should be replaced at first signs of wear.

*Eye protection*

Advice : Tightly fitting safety goggles

*Skin and body protection*

Advice : alkali resistant protective clothing

**Environmental exposure controls**

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General advice : Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Form : solid

Colour : white

Odour : odourless

Odour Threshold : no data available

pH : ca. 14 (56 g/l; 20 °C)

Melting point/range : ca. 410 °C

Boiling point/boiling range : no data available

Flash point : not applicable

Evaporation rate : negligible

Flammability (solid, gas) : does not ignite

Upper explosion limit : not applicable

Lower explosion limit : not applicable

Vapour pressure : negligible

Relative vapour density : not applicable

Density : 2,1 g/cm<sup>3</sup> (20 °C)

Water solubility : 1130 g/l (20 °C)

Partition coefficient: n-octanol/water : no data available

Ignition temperature : not applicable



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Thermal decomposition	:	no data available
Viscosity, dynamic	:	not applicable
Explosivity	:	Product is not explosive.
Oxidizing properties	:	not applicable

**9.2. Other information**

No further information available.

**10. Stability and reactivity****10.1. Reactivity**

Advice : Stable under recommended storage conditions.

**10.2. Chemical stability**

Advice : No decomposition if stored and applied as directed.

**10.3. Possibility of hazardous reactions**

Hazardous reactions : Exothermic reaction with strong acids. Reacts exothermic with water Gives off hydrogen by reaction with base metals (zinc, aluminium). Risk of explosion.

**10.4. Conditions to avoid**

Conditions to avoid : Protect from humidity and keep away from water. Product is hygroscopic.

Thermal decomposition : no data available

**10.5. Incompatible materials**

Materials to avoid : Water, Amines, Ammonia, Light metals, Strong acids, ammonium compounds, Halogenated compounds, Organic materials

**10.6. Hazardous decomposition products**

Hazardous decomposition products : No information available.

**11. Toxicological information**

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**11.1. Information on toxicological effects****Acute toxicity****Oral**

Acute toxicity estimate : 303,33 mg/kg ) (Calculation method)

**Inhalation**

Inhalation may cause pain in respiratory system, sneezing, coughing and difficulty in breathing. Risk for pulmonary edema by high concentration.

**Irritation****Skin**

Result : May cause burns with pain, redness and wounds.

**Eyes**

Result : Splashes in the eyes may cause painful burns, which may result in permanent damage to the eyes.

**Component: potassium hydroxide**

**CAS-No.  
1310-58-3**

**Acute toxicity****Oral**

LD50 : 273 mg/kg (rat)

**Sensitisation**

Result : not sensitizing (guinea pig)

**12. Ecological information****12.1. Toxicity**

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**Component: potassium hydroxide****CAS-No.  
1310-58-3****Acute toxicity****Fish**

LC50 : 80 mg/l (Gambusia affinis; 96 h)

LC50 : 165 mg/l (Poecilia reticulata; 24 h)

**Bacteria**

EC50 : 22 mg/l (Photobacterium phosphoreum; 15 min)

**12.2. Persistence and degradability****Component: potassium hydroxide****CAS-No.  
1310-58-3****Persistence and degradability****Persistence**

Result : no data available

**Biodegradability**

Result : The methods for determining biodegradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential****Component: potassium hydroxide****CAS-No.  
1310-58-3****Bioaccumulation**

Result : Bioaccumulation is not expected.

**12.4. Mobility in soil**

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**Component: potassium hydroxide**
**CAS-No.  
1310-58-3**
**Mobility**

: Adsorption to solid soil phase is not expected., The product is water soluble.

**12.5. Results of PBT and vPvB assessment**
**Component: potassium hydroxide**
**CAS-No.  
1310-58-3**
**Results of PBT and vPvB assessment**

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

**12.6. Other adverse effects**
**Additional ecological information**

Result : Harmful effects to aquatic organisms due to pH-shift. Neutralization is normally necessary before waste water is discharged into water treatment plants. Do not flush into surface water or sanitary sewer system.

**13. Disposal considerations**
**13.1. Waste treatment methods**

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates

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the assignment. The waste code is established in consultation with the regional waste disposer.

**14. Transport information****14.1. UN number**

1813

**14.2. UN proper shipping name**

ADR : POTASSIUM HYDROXIDE, SOLID  
RID : POTASSIUM HYDROXIDE, SOLID  
IMDG : POTASSIUM HYDROXIDE, SOLID

**14.3. Transport hazard class(es)**

ADR-Class : 8  
(Labels; Classification Code; Hazard identification No; Tunnel restriction code) 8; C6; 80; (E)  
RID-Class : 8  
(Labels; Classification Code; Hazard identification No) 8; C6; 80  
IMDG-Class : 8  
(Labels; EmS) 8; F-A, S-B

**14.4. Packaging group**

ADR : II  
RID : II  
IMDG : II

**14.5. Environmental hazards**

Labeling according to 5.2.1.8 ADR : no  
Labeling according to 5.2.1.8 RID : no  
Labeling according to 5.2.1.6.3 IMDG : no  
Classification as environmentally hazardous according to 2.9.3 IMDG : no  
Classified as "P" according to 2.10 IMDG : no

**14.6. Special precautions for user**

Not applicable.

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**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

IMDG : Not applicable.

**15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Notification status****potassium hydroxide:**

Regulatory List	Notification	Notification number
AICS	YES	
DSL	YES	
INV (CN)	YES	
ENCS (JP)	YES	(1)-369
ISHL (JP)	YES	(1)-369
TSCA	YES	
EINECS	YES	215-181-3
KECI (KR)	YES	97-1-137
KECI (KR)	YES	KE-29139
PICCS (PH)	YES	

**15.2. Chemical Safety Assessment**

Currently we do not have any Information from our supplier about this.

**16. Other information****Full text of R-phrases referred to under sections 2 and 3.**

R22	Harmful if swallowed.
R35	Causes severe burns.

**Full text of H-Statements referred to under sections 2 and 3.**

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

**Further information**

Other information : Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. The information provided

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in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.