


MSDS	Material Safety Data Sheet
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POTASSIUM HYDROXIDE

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

PRODUCT NAME	Potassium hydroxide
RECOMMENDED USE & RESTRICTIONS ON USE	Research use only
INFORMATION OF MANUFACTURER/IMPORTER/SUPPLIER	
COMPANY	Eurolab [®]
ADDRESS	54-58 High Street Edgware, Middlesex, HA8 7EJ, UK
EMERGENCY PHONE	
E-MAIL ADDRESS	

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Acute toxicity(Oral) : Category 3 Skin corrosion/irritation : Category 1 Serious eye damage/Eye irritation : Category 1 Specific target organ systemic toxicity Single exposure : Category 1 Aspiration toxicity : Category 1	
LABEL ELEMENTS	PICTOGRAM	
	HAZARD SYMBOL	DANGER
	HAZARD STATEMENTS	Toxic if swallowed. May be fatal if swallowed and enters airways.

		<p>Causes severe skin burns and eye damage</p> <p>Causes serious eye damage</p> <p>Causes damage to organs.</p>
	PRECAUTIONARY STATEMENTS	<p>Do not breathe dust/fume/gas/mist/vapours/spray.</p> <p>Wash thoroughly after handling.</p> <p>Do not eat, drink or smoke when using this product.</p> <p>Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</p> <p>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>IF exposed: Call a POISON CENTER or doctor/physician. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see ... on this label).</p> <p>Rinse mouth.</p> <p>Do NOT induce vomiting.</p> <p>Take off contaminated clothing and wash before reuse.</p> <p>Store locked up.</p> <p>Dispose of this material and its container in accordance with local/regional/national/international regulation.</p>
OTHER HAZARDS (NFPA)	Health	3
	Fire	0
	Reactivity	1

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	SYNONYMS	CAS NUMBER	ASSAY
Potassium hydroxide	-	1310-58-3	Above 85%(GR, EP); 85~101%(KP)

4. FIRST AID MEASURES

GENERAL ADVICE	Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
IN CASE OF EYE CONTACT	Remove any contact lenses at once. Flush eyes well with flooding amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. Transport to a hospital immediately.
IN CASE OF SKIN CONTACT	Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Do not use soap to help assure removal. If irritation persists, transport to a hospital immediately.
IF INHALED	Move victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Maintain normal body temperature with a blanket. If irritation persists, transport to a hospital immediately.
IF SWALLOWED	Rinse mouth, give plenty of water to dilute the substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	Not combustible. Use extinguishing media appropriate to the surrounding fire.
SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	Toxic, irritating dust or smoke may be emitted. Explosive hydrogen gas is released upon contact with common metals.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:	Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.
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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
ENVIRONMENTAL PRECAUTIONS	Prevent spills from entering sewers, watercourses or low areas.
METHODS FOR CLEANING UP	Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING	Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection. This material is deliquescent and readily absorbs water and carbon dioxide from air.
CONDITIONS FOR SAFE STORAGE	Store away from sunlight in well-ventilated dry place at room temperature (preferably cool place). Keep container tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS	ACGIH	No data
APPROPRIATE ENGINEERING CONTROLS:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
INDIVIDUAL RESPIRATORY	Where risk assessment shows air-purifying respirators are	

PROTECTION MEASURES	PROTECTION	appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup Sigma-Aldrich - 270997 Page 4 of 7 to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
	EYE PROTECTION	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
	SKIN PROTECTION	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
	BODY PROTECTION	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	FORM	Solid
	COLOR	White
ODOUR		Odourless
ODORODOUR THRESHOLD VALUE		No data
pH		13.5 (0.1 M Sol'n)
FREEZING POINT :		380 °C
INITIAL BOILING POINT		1324 °C
FLASH POINT		No data

EVAPORATING RATE		No data
FLAMMABILITY(solid, gas)		No data
EXPLOSIVE LIMITS		No data
VAPOR PRESSURE		1 mmHg (719°C)
SOLUBILITY IN	WATER	112 g/100mL (20°C)
VAPOR DENSITY		No data
RELATIVE DENSITY		2.044
PARTITION COEFFICIENT: N-OCTANOL/WATER		No data
AUTOIGNITION TEMPERATURE		No data
DECOMPOSITION TEMPERATURE		No data
VISCOSITY		No data
MOLECULAR WEIGHT		56.11

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY & POSSIBILITY OF HAZARDOUS REACTIONS	Stable under recommended storage conditions.
CONDITIONS TO AVOID	Sunlight, heat, moisture
INCOMPATIBLE MATERIALS	Acids and most metals.
HAZARDOUS DECOMPOSITION PRODUCTS	No data

11. TOXICOLOGICAL INFORMATION

INFORMATION ON THE LIKELY ROUTES OF EXPOSURES:	No data	
HEALTH HAZARD INFORMATION	ACUTE TOXICITY	LD50(oral,rat) : 273 mg/kg
	SKIN CORROSION/ SKIN IRRITATION	Skin; human; 50mg/24H; Severe(TXAPA9 31,481,1975)

		Skin; rabbit; 50mg/24H; Severe(TXAPA9 31,481,1975)
	EYE DAMAGE/ EYE IRRITATION	Eye; rabbit; 1mg/24H; Moderate(TXAPA9 32.239,1975)
	RESPIRATORY SENSITIZATION	No data
	SKIN SENSITIZATION	Guinea pig; Negative
	CARCINOGENICITY	IARC: No data OSHA: No data ACGIH: No data NTP: No data EU CLP: No data
	GERM CELL MUTAGENICITY	Cytogenetic analysis; hamster; ovary; 12mmol/L(MUREAV 225,55,1989)
	TOXIC TO REPRODUCTION	No data
	SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE	Human, dust or mist, damage of nose, bronchi and lung edema(SIDS 2001;ACGIH 2001; PATTY 5th,2001)
	SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE	No data
	ASPIRATION HAZARD	Human, pneumonia by inhalation(ACGIH 2001)

12. ECOLOGICAL INFORMATION

ECOTOXICITY	TO FISH	LC50 165 mg/L/24 hr
	TO CRUSTACEA	No data
	TO OTHER AQUATIC LIFE	No data
PERSISTENCE/ DEGRADABILITY	PERSISTENCE	No data
	DEGRADABILITY	No data
BIOACCUMULATION POTENTIAL	ACCUMULATION	No data
	BIODEGRADABILITY	No data

MOBILITY IN SOIL	No data
OTHER ADVERSE EFFECTS	No data

13. DISPOSAL CONSIDERATION

DISPOSAL METHODS	Use only licensed transporters and permitted facilities for waste disposal.
DISPOSAL CONSIDERATIONS	Dispose of this material and its container in accordance with local/regional/national/international regulation.

14. TRANSPORT INFORMATION

IATA	
UN NUMBER	1813
UN PROPER SHIPPING NAME	POTASSIUM HYDROXIDE, SOLID
TRANSPORT HAZARD CLASS	6.1
PACKING GROUP	2
MARINE POLLUTANT	No data
SPECIAL PRECAUTIONS FOR USER	
IN CASE OF FIRE	F – A
IN CASE OF LEAK	S - B

15. REGULATORY INFORMATION

Occupational Safety and Health Act	Substance Requiring Working Environment Measurement (period : 6 month) Hazardous Substance Requiring Management Substance Requiring Exposure Standards
Toxic Chemicals Control Act	Listed
Safety Control of Dangerous Substance Act	No data
Wastes Control Act	Controlled Waste
Persistent Organic Pollutants Control Act	Not listed

US REGULATIONS	OSHA	Not listed
	CERCLA	453.599 kg 1000 lb
	EPCRA302	Not listed
	EPCRA304	Not listed
	EPCRA313	Not listed
	ROTTERDAM CONVENTION	Not listed
	STOCKHOLM CONVENTION	Not listed
	MONTREAL PROTOCOL	Not listed
EU CLASSIFICATION INFORMATION	CLASSIFICATION	Xn; R22 C; R35
	RISK PHRASES	R22, R35
	SAFETY PHRASES	S1/2, S26, S36/37/39, S45

16. OTHER INFORMATION

ORIGINATED DATE	2012.01.01
REVISION NUMBER AND DATE	Revision number: 0 Final revision data: 2012.01.01
OTHER	The information in this MSDS is based on several references and the present state of our knowledge. However, the MSDS dose not always cover all information about product. The information in this MSDS is only provision of information, and It does not represent any guarantee of the properties of the product.