Creation Date 18-Jul-2011 Revision Date 18-Jul-2011 Revision Number 1

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name Potassium Hydroxide 10%

Cat No. R21230

**Synonyms**Recommended Use
No information available.
Laboratory chemicals

Company Remel Entity / Business Name

12076 Santa Fe Drive Oxoid Ltd. Lenexa, KS 66215 United States Wade Road

Telephone: 1-800-255-6730 Basingstoke, Hants, UK

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#### 2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.



R -phrase(s)

R35 - Causes severe burns

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Haz/Non-haz

Component	Weight %	EC No.	Classification
Potassium hydroxide	10	215-181-3	Xn; R22
1310-58-3			C; R35
Glycerol	10	200-289-5	-
56-81-5			

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

Potassium Hydroxide 10%

Revision Date 18-Jul-2011

#### 4. FIRST AID MEASURES

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek

immediate medical attention/advice.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes

**Ingestion** Clean mouth with water and afterwards drink plenty of water. Obtain medical attention.

**Inhalation** Move to fresh air. Get medical attention if symptoms occur...

Notes to Physician Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

#### Extinguishing media which must not be used for safety reasons

No information available.

## **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Flash Point Not applicable

Method No information available.

Autoignition Temperature No information available.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal

protective equipment.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so

Methods for Containment and Clean Neutralise with water or acid Soak up with inert absorbent material

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#### Potassium Hydroxide 10%

Revision Date 18-Jul-2011

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#### 7. HANDLING AND STORAGE

**Handling** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Storage** Keep container tightly closed in a dry and well-ventilated place. Protect from light. Protect from

moisture.

**Specific use(s)** No information available.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Exposure limits**

Component	European Union	The United Kingdom	Belgium	France	Spain	Germany
Potassium hydroxide		WEL - 2 mg/m <sup>3</sup> STEL	STEL: 2mg/m³ VLE	VLCT: 2 mg/m <sup>3</sup>	VLA-EC: 2 mg/m <sup>3</sup>	
Glycerol		STEL: 30 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	VME: 10 mg/m <sup>3</sup>	VLA-ED: 10 mg/m <sup>3</sup>	MAK: 50 mg/m <sup>3</sup> Peak: 100 mg/m <sup>3</sup>

Component	Italy	Portugal	The Netherlands	Finland	Austria
Potassium hydroxide		Ceiling: 2 mg/m <sup>3</sup>	MAC-C: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>	MAK: 2 mg/m <sup>3</sup>
				Ceiling: 2 mg/m <sup>3</sup>	_
Glycerol		TWA: 10 mg/m <sup>3</sup>		TWA: 20 mg/m <sup>3</sup>	

Component	Switzerland	Poland	Norway	Ireland	Denmark	Australia
Potassium hydroxide	MAK: 2 mg/m <sup>3</sup>	NDSCh: 1 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
		NDS: 0.5 mg/m <sup>3</sup>				
Glycerol	STEL: 100 mg/m <sup>3</sup>	NDS: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>
1	MAK: 50 mg/m <sup>3</sup>					

#### Occupational exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas

**Personal Protective Equipment** 

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN

149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

**Eye Protection** 

Tightly fitting safety goggles

Skin and body protection Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure

Protective gloves

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** No information available.

#### Potassium Hydroxide 10%

Revision Date 18-Jul-2011

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical StateLiquidAppearanceColourless

PH No information available.

Boiling Point/Range Not applicable

Melting Point/Range No information available.

Flash Point Not applicable

#### 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

Conditions to Avoid Incompatible products

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon oxides

Hazardous Polymerization No information available

**Hazardous Reactions** . None under normal processing.

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

#### **Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	214 mg/kg (Rat)		
Glycerol	12600 mg/kg (Rat)	21900 mg/kg (Rat)	

#### **Chronic Toxicity**

Carcinogenicity There are no known carcinogenic chemicals in this product

SensitizationNo information available.Neurological EffectsNo information available.Mutagenic EffectsNo information available.

Potassium Hydroxide 10%

Revision Date 18-Jul-2011

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Reproductive Effects

No information available.

Developmental Effects

No information available.

Target Organs Respiratory system, Eyes, Kidney, Skin.

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

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Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Potassium hydroxide		80 mg/L LC50 96 h		
Glycerol		51 - 57 mL/L LC50 96 h		500 mg/L EC50 > 24 h

Persistence and Degradability

Bioaccumulative Potential

No information available.

Mobility

No information available.

Component	log Pow
Potassium hydroxide	0.65
	0.83
Glycerol	-1.76

## 13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused

**Products** 

Dispose of as hazardous waste in compliance with local and national regulations

**Contaminated Packaging** 

Empty containers should be taken for local recycling, recovery or waste disposal

#### 14. TRANSPORT INFORMATION

#### IMDG/IMO

UN-No UN1814 Hazard Class 8 Packing Group II

Proper Shipping Name Potassium hydroxide solution

ADR

UN-No UN1814 Hazard Class 8

#### Potassium Hydroxide 10%

Revision Date 18-Jul-2011

#### 14. TRANSPORT INFORMATION

**Packing Group** 

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**Proper Shipping Name** Potassium hydroxide solution

IATA

**UN-No** UN1814

**Hazard Class Packing Group** 

**Proper Shipping Name** Potassium hydroxide, solution

#### 15. REGULATORY INFORMATION

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

#### Labelling



#### R -phrase(s)

R35 - Causes severe burns

#### S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

#### **International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Potassium hydroxide	-	-		X	X	-	X	Х	X	Χ	X
Glycerol	-	-		X	X	-	X	X	X	Χ	X

## 16. OTHER INFORMATION

#### Text of R phrases mentioned in Section 2-3

R22 - Harmful if swallowed

R35 - Causes severe burns

Potassium Hydroxide 10%

Revision Date 18-Jul-2011

#### 16. OTHER INFORMATION

Prepared By Regulatory Affairs

Creation Date 18-Jul-2011

Revision Date 18-Jul-2011

Revision Summary "\*\*\*", and red text indicates revision

**Restrictions on use**No information available.

**Training advice** No information available.

**Literary reference** No information available.

#### Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of Safety Data Sheet**