

Potassium hydroxide**06103-40KG**

Version 1.2

Revision Date 06/06/2022

Print Date 05/29/2023

SECTION 1. IDENTIFICATION

Product name : Potassium hydroxide

Number : 000000020767

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : colourless

Odor : odourless

Classification of the substance or mixture

Classification of the substance or mixture : Corrosive to metals, Category 1
Acute toxicity, Category 4, Oral
Skin corrosion, Category 1A
Serious eye damage, Category 1

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GHS Label elements, including precautionary statements

Symbol(s)

:



Signal word

: Danger

Hazard statements

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

Precautionary statements

: **Prevention:**
Keep only in original container.
Do not breathe dust or mist.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.**Response:**

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/ doctor.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Storage:

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

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Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : KOH

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Potassium hydroxide	1310-58-3	>=85.00 - <=100.00 %

SECTION 4. FIRST AID MEASURES

General advice : Immediately take off contaminated clothing and rinse body with plenty of water. First aider needs to protect himself.

Inhalation : Remove to fresh air. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician immediately.

Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician immediately.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Call a physician immediately.

Ingestion : When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

Notes to physician

Most important : No information available.

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symptoms/effects, acute and
delayed

Indication of immediate : Treat symptomatically.
medical attention and
special treatment needed, if
necessary

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder

Specific hazards during : Contact with metals liberates hydrogen gas.
firefighting Fire may cause evolution of:
Potassium oxide

Special protective equipment : Wear self-contained breathing apparatus and protective suit.
for firefighters

Further information : Use extinguishing measures that are appropriate to local
circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, : Evacuate personnel to safe areas.
protective equipment and : Wear personal protective equipment. Unprotected persons
and emergency procedures : must be kept away.
Keep people away from and upwind of spill/leak.
Ensure adequate ventilation.
Do not get in eyes, on skin, or on clothing.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.
Should not be released into the environment.

Methods and materials for : Avoid dust formation.
containment and cleaning : Use mechanical handling equipment.
up : Sweep up or vacuum up spillage and collect in suitable
container for disposal.
Dispose of in accordance with local regulations.

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SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Do not breathe dust or spray mist.
Do not get in eyes, on skin, or on clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage conditions : Product is hygroscopic.
Protect from atmospheric moisture and water.

Advice on common storage : Do not store together with acids and ammonium salts.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid dust formation.
Do not breathe dust or spray mist.
Do not get in eyes, on skin, or on clothing.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety goggles
Face-shield

Hand protection : Impervious gloves

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Gloves must be inspected prior to use.
Replace when worn.

- Skin and body protection : Wear suitable protective equipment.
Complete suit protecting against chemicals
- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
- Hygiene measures : Take off all contaminated clothing immediately.
Remove and wash contaminated clothing before re-use.
Keep working clothes separately.
Wash hands before breaks and immediately after handling the product.
When using do not eat or drink.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Potassium hydroxide	1310-58-3	Ceiling : Ceiling Limit Value:	2 mg/m3	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Potassium hydroxide	1310-58-3	Ceil_Tim e : Ceiling Limit Value and Time Period (if specified) :	2 mg/m3	2016	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Potassium hydroxide	1310-58-3	Ceiling : Ceiling Limit Value:	2 mg/m3	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

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Color	: colourless
Odor	: odourless
Odor threshold	: Note: No data available
pH	: 14 at , 20 °C Note: (as aqueous solution)
Melting point/range	: 360 °C
Boiling point/boiling range	: 1,327 °C at 1,013 hPa
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: ca. 2.04 g/cm ³ at 20 °C
Water solubility	: 1,120 g/l at 20 °C Note: Reacts violently with water.

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Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Viscosity, dynamic	: Note: Not applicable
Viscosity, kinematic	: Note: Not applicable
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 56.11 g/mol
Bulk density	: ca. 1,300 kg/m ³
Corrosivity	: Note: Corrosive to metals

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Possible incompatibility with alkali sensitive materials. With acid and aluminium. Reacts violently with water. Corrosive in contact with metals
Conditions to avoid	: Corrodes metals in the presence of water or moisture. Protect from moisture.
Incompatible materials	: Zinc Tin Aluminium Gives off hydrogen by reaction with metals. Exothermic reaction with water. Exothermic reaction with strong acids.

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Hazardous decomposition : Potassium oxide
products

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: 333 mg/kg
Species: Rat
Method: OECD Test Guideline 425

Acute inhalation toxicity : Note: Toxicity is determined by the corrosivity of the product.

Acute dermal toxicity : Note: Toxicity is determined by the corrosivity of the product.

Skin irritation : Result: Causes severe burns.
Classification: Corrosive

Eye irritation : Species: Rat
Result: Corrosive
Classification: Corrosive
Method: OECD Test Guideline 405

Sensitisation : Species: Guinea pig
Classification: non-sensitizing
Test substance: KOH (0,1%)

Repeated dose toxicity : Note: No data available

Genotoxicity in vitro : Test Method: Ames test
Metabolic activation: with and without metabolic activation
Result: negative

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : Note: No data available

Toxicity to daphnia and other aquatic invertebrates : Note: No data available

Toxicity to algae : Note: No data available

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining the biological degradability are not applicable to inorganic substances.

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT	UN/ID No.	: UN 1813
	Proper shipping name	: POTASSIUM HYDROXIDE, SOLID
	Class	: 8
	Packing group	: II
	Hazard Labels	: 8

IATA	UN/ID No.	: UN 1813
	Description of the goods	: POTASSIUM HYDROXIDE, SOLID
	Class	: 8
	Packaging group	: II
	Hazard Labels	: 8

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Packing instruction (cargo aircraft) : 863
Packing instruction (passenger aircraft) : 859
Packing instruction (passenger aircraft) : Y844

IMDG UN/ID No. : UN 1813
Description of the goods : POTASSIUM HYDROXIDE, SOLID
Class : 8
Packaging group : II
Hazard Labels : 8
EmS Number : F-A, S-B
Marine pollutant : no
IMDG Code segregation group (SGG18) – ALKALIS,

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemicals Act (AIC), 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

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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) : On the inventory, or in compliance with the inventory

National regulatory information

US. EPA CERCLA Hazardous Substances (40 CFR 302) : The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):

Reportable quantity: 1000 lbs
: Potassium hydroxide 1310-58-3

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : Acute Health Hazard

CERCLA Reportable Quantity : 1000 lbs

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Potassium hydroxide 1310-58-3

New Jersey RTK : Potassium hydroxide 1310-58-3

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Pennsylvania RTK

: Potassium hydroxide

1310-58-3

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3*	3
Flammability	: 0	0
Physical Hazard	: 2	
Instability	:	1

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 07/05/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group