

+1.703.527.3887 (INT)

SAFETY DATA SHEET

Potassium Hydroxide, Pellets
This SDS is valid for all grades that start with catalog number 287

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: High Purity Chemicals

Synonyms: Caustic potash
Other means of identification: CAS No. 1310-58-3
EINECS No. 215-181-3

Recommended use of the chemical and restrictions on use:

Supplier Details:

Greenfield Global USA, Inc.

58 Vale Road, Brookfield,

CT 06804, USA. Tel: 203.740.3471 Fax: 203.740.3481

CCN17213

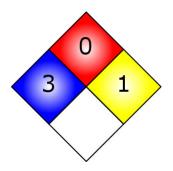
Emergency Contact: CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION

OSHA Hazards:

Corrosive, Toxic by ingestion

NFPA



GHS label elements, including precautionary statements

SDS: 413 Revision Date: 06.18.15 Revision Number: 4.0 Initials: EF

Page 1 of 9



+1.703.527.3887 (INT)



Signal Word:

DANGER!

H314

Hazard statement(s)

H290 May be corrosive to metals. H302 Harmful if swallowed.

Causes severe skin burns and eye damage.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves and eye and face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing.

Rinse skin with water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Seek

medical attention.

P310 Immediately call a POISON CENTER or doctor/ physician.

GHS Classification(s)

Acute toxicity, Oral (Category 4) Eye irritation (Category 2) Metal corrosion (Category 1) Skin corrosion (Category 1A) Skin irritation (Category 2)

Other hazards which do not result in classification:

Potential Health Effects:

Organ	Description	
Eyes	Causes eye burns. Causes severe eye burns.	
Ingestion	Toxic if swallowed.	
Inhalation	May be harmful if inhaled. Material is extremely damaging to the upper respiratory tract.	
Skin	May be harmful if absorbed through skin. Causes skin burns.	

3. COMPOSITION AND INFORMATION ON INGREDIENTS



Chemical identity: Potassium Hydroxide +1.703.527.3887 (INT)

Common name / Synonym:

Caustic potash
1310-58-3
EINECS number:
215-181-3
ICSC number:
0357
UN #:
1813

EC #: 019-002-00-8

% Weight	Material	CAS
>85	Potassium Hydroxide	1310-58-3

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing/shoes.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Keep rinsing while in transport to hospital.

Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Potassium oxides and oxides of phosphorus expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) unopened containers cool by spraying with water. +1.703.527.3887 (INT)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Sweep up and place material in a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE

Precautions for safe handling:

Provide proper exhaust ventilation system in areas where dust forms. Take normal fire prevention measures.

Conditions for safe storage, including any incompatibilites:

Keep container tightly closed in a cool, dry, and well-ventilated place. Avoid air and moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

Component	Source	Type	Value	Note
Potassium Hydroxide	US (ACGIH)	Ceiling	2 mg/m3	ACGIH Threshold Limit Value
Potassium Hydroxide	US (NIOSH)	Ceiling	2 mg/m3	NIOSH Recommended Exposure Limit

Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup 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).



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Hand protection: +1.703.527.3887 (INT)

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.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Pellets.
pH	13.5
Freezing point	361 °C (682 °F)
Initial boiling point and boiling range	1,320 °C (2,408 °F)
Vapor pressure	1 hPa (1 mmHg) at 719 °C (1,326 °F)
Relative Density	2.044 g/cm3
Solubility(ies)	soluble in water
Formula (POTASSIUM HYDROXIDE)	HKO
Molecular Weight (POTASSIUM HYDROXIDE)	56.11 g/mol

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	No data available
Conditions to avoid (e.g., static discharge, shock or vibration)	Heat, flames, and sparks.
Incompatible materials	Nitro compounds, Organic materials, Magnesium, Copper, Water, reacts violently with:, Metals, Light metals, Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds causes formation of shock-sensitive salts., vigorous reaction with:, Alkali metals, Halogens, Azides, Anhydrides
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions Potassium oxides



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) 11. TOXICOLOGICAL INFORMATION +1.703.527.3887 (INT)

• Potassium Hydroxide 1310-58-3

Product Summary:

No data available for the mutagenic, teratogenic, or reproductive effects of the product.

Acute Toxicity:

LD50 (O	Oral)	Rat	273 mg/kg	

Irritation:

Eyes

Rabbit - eye irritation - 24 hours

Skin

Rabbit - severe skin irritation - 24 hours

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: 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.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description	
Eyes	Causes eye burns. Causes severe eye burns.	
Ingestion	Toxic if ingested.	
Inhalation	May be harmful if inhaled. Material is extremely damaging to the upper respiratory tract.	
Skin	May be harmful if absorbed through skin. Causes skin burns.	

12. ECOLOGICAL INFORMATION

• Potassium Hydroxide 1310-58-3

Ecotoxicity (aquatic and terrestrial, where available): Acute Fish Toxicity (POTASSIUM HYDROXIDE)

SDS: 413 Revision Date: 06.18.15 Revision Number: 4.0 Initials: EF

Page 6 of 9



LC50 / 96 hours Mosquito Fish - 80 mg/L

+1.703.527.3887 (INT)

Persistence and degradability:

No data available

Bioaccumulative potential:

No data available

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Recycle to process, if possible. Consult your local or regional authorities.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

becomplied of waste recidates and information on their sale manaling and methods of disposali		
UN number	1813	
UN proper shipping name	Potassium hydroxide, solid	
Transport hazard class(es)	8	
Packing group (if applicable)	ll .	

Reportable Quantity

1,000 lbs **IMDG**

UN-Number: 1813 Class: 8 Packing Group: II

EMS-No: F-A, S-B

Proper shipping name: POTASSIUM HYDROXIDE, SOLID

Marine pollutant: No

IATA

UN-Number: 1813 Class: 8 Packing Group: II Proper shipping name: Potassium hydroxide, solid

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards

Corrosive, Toxic by ingestion

All ingredients are on the following inventories or are exempted from listing



Country	Notification +1.703.527.3887 (INT
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

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

Potassium hydroxide CAS-No. 1310-58-3, RQ: 1,000 lbs.

Massachusetts Right To Know Components

Potassium hydroxide CAS-No. 1310-58-3 Revision Date 2007-03-01

Pennsylvania Right To Know Components

Potassium hydroxide CAS-No. 1310-58-3 Revision Date 2007-03-01

New Jersey Right To Know Components

Potassium hydroxide CAS-No. 1310-58-3 Revision Date 2007-03-01

California Prop 65 Components

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

16. OTHER INFORMATION:



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) INCLUDING INFORMATION ON PREPARATION AND REVISION OF THEOSES.3887 (INT)

Disclaimer

Greenfield Global USA, Inc. believes that the information on this SDS was obtained from reliable sources. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, Greenfield Global USA, Inc. does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable. Information is correct to the best of our knowledge at the date of the SDS publication.