



Material Safety Data Sheet

Potassium hydroxide, reagent acs (pellets) , 85% (titr.)

MSDS# 96425

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium hydroxide, reagent acs (pellets) , 85% (titr.)  
Catalog Numbers: AC424140000, AC424140050, AC424140250, AC9585833, 42414-0025, 42414-5000  
Synonyms: Caustic potash; lye; potassium hydrate

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

Company Identification: (USA) Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

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CAS#: 1310-58-3  
Chemical Name: Potassium hydroxide  
%: 85.0  
EINECS#: 215-181-3  
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Hazard Symbols: C



Risk Phrases: 35

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Corrosive. Water-reactive. Hygroscopic (absorbs moisture from the air). Causes severe eye and skin burns. Causes severe digestive and respiratory tract burns. Harmful if inhaled or swallowed. Target Organs: None.

Potential Health Effects

Eye: Causes severe eye burns. May cause irreversible eye injury. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed. Causes redness and pain. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin burns. May cause deep, penetrating ulcers of the skin. Causes severe burns with delayed tissue destruction. Causes redness and pain. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion: Harmful if swallowed. May cause severe and permanent damage to the digestive tract. May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause systemic effects.

Harmful if inhaled. Irritation may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Aspiration may lead to pulmonary edema. May cause systemic effects.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis. Effects may be delayed.

#### Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Discard contaminated clothing in a manner which limits further exposure. Destroy contaminated shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use water with caution and in flooding amounts. Contact with moisture or water may generate sufficient heat to ignite nearby combustible materials.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. DO NOT USE WATER!

Autoignition Temperature: Not available.

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: NFPA Rating:

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Do not allow water to get into the container because of violent reaction. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use only in a chemical fume hood. Discard contaminated shoes.

Storage: Store in a cool, dry place. Keep container closed when not in use. Store in a tightly closed container. Corrosives area.

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs

Potassium hydroxide	2 mg/m3 Ceiling	none listed	none listed
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OSHA Vacated PELs: Potassium hydroxide: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. 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.

### Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white

Odor: Odorless

pH: Not available

Vapor Pressure: 1 mm Hg @ 719 deg C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 1320 deg C @ 760.00mm Hg ( 2,408.00°F)

Freezing/Melting Point: 360 deg C ( 680.00°F)

Decomposition Temperature: Not available

Solubility in water: 111 G/100 ML WATER (20°C)

Specific Gravity/Density: 2.0440g/cm3

Molecular Formula: HKO

Molecular Weight: 56.11

### Section 10 - Stability and Reactivity

Chemical Stability: Stable. Readily absorbs carbon dioxide and moisture from the air and deliquesces (to absorb atmospheric water vapor and become liquid).

Conditions to Avoid: Dust generation, exposure to moist air or water.

Incompatibilities with Other Materials: Metals, acids.

Hazardous Decomposition Products: Oxides of potassium, hydrogen gas.

Hazardous Polymerization: Will not occur.

### Section 11 - Toxicological Information

RTECS#: CAS# 1310-58-3: TT2100000

RTECS:

LD50/LC50: CAS# 1310-58-3: Draize test, rabbit, skin: 50 mg/24H Severe;  
Oral, rat: LD50 = 273 mg/kg;

Carcinogenicity: Potassium hydroxide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

Ecotoxicity: Fish: Mosquito Fish: LC50 = 80.0 mg/L; 24 Hr.; Unspecified

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

US DOT

Shipping Name: POTASSIUM HYDROXIDE, SOLID

Hazard Class: 8

UN Number: UN1813

Packing Group: II

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 1310-58-3: 1000 lb final RQ; 454 kg final RQ

## Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 35 Causes severe burns.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 1310-58-3: 1

Canada

CAS# 1310-58-3 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1B, E

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 1310-58-3 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 1310-58-3 is listed on the TSCA

Inventory.

## Section 16 - Other Information

MSDS Creation Date: 6/21/1999

Revision #4 Date 11/20/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no

event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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