

# SAFETY DATA SHEET

SDS No. 1050-24005

Revised date December 4, 2015

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## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : 2 % Potassium hydroxide Silicagel  
NAME OF MANUFACTURER : GL Sciences Inc.  
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan  
CHARGE SECTION : International Sales Section  
TELEPHONE No. : +81-3-5323-6620  
FACSIMILE No. : +81-3-5323-6621  
PRODUCT No. : 1050-24005  
SDS No. : 1050-24005  
Research use only.

## 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Skin corrosion/irritation : Category 2  
Eye damage/irritation : Category 2  
Specific target organ toxicity (Single exposure)  
: Category 2 (respiratory tract system)

HAZARD SYMBOL :



SIGNAL WORD : Warning

HAZARD STATEMENTS :

H315 Cause skin irritation  
H319 Cause serious eye irritation  
H371 May cause damage to organs

PRECAUTIONARY STATEMENTS :

P260 Do not breathing dust.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P270 Do not eat, drink or smoke when using this product.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P332+P313 If skin irritation occurs: Get medical attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical attention.  
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with all applicable regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CHEMICAL IDENTITY   | CONTENT | CHEMICAL FORMULA | CAS No.   | TSCA INVENTORY | EINECS No. | EC INDEX No.    |
|---------------------|---------|------------------|-----------|----------------|------------|-----------------|
| Silicagel           | 98 %    | SiO <sub>2</sub> | 7631-86-9 | Listed         | 231-545-4  | Not established |
| Potassium hydroxide | 2 %     | KOH              | 1310-58-3 | Listed         | 215-181-3  | 019-002-00-8    |

## 4. FIRST AID MEASURES

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

- EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician. Never rub your eyes.
- INGESTION : Rinse mouth, give plenty of water to dilute the substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA : Powder, foam (alcohol foam), carbon dioxide, water spray.
- DISABLED EXTINGUISHING MEDIA : Straight stream.
- FIRE & EXPLOSION HAZARDS : Toxic, irritating, fumes or smoke may be emitted.
- SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS : Firemen should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

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.
- ENVIROMENTAL PRECATIONS : Prevent spills from entering sewers, watercourses or low areas.
- METHODS FOR CLEAN 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. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

- HANDLING : Keep away from ignition sources and ventilate the area - No smoking. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle this product with suitable protection. After using this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
- STORAGE : Store away from sunlight, heat and all ignition sources in well-ventilated dry place. Keep container tightly closed.
- INCOMOPATIBLE PRODUCTS : Strong oxidizers, acids

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- ENGINEERING MEASURES : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
- VENTILATION : Local Exhaust ; Necessary, Mechanical(General) ; Recommended
- PERSONAL PROTECTION
- RESPIRATORY PROTECTION : Safety mask(Use respirators approved under appropriate government standards and follow all regulations.)
- HAND PROTECTION : Protective gloves
- EYE PROTECTION : Safety glasses(goggles)
- SKIN PROTECTION : Protective clothing

CONTROL PARAMETERS

|                     | ACGIH TLVs                   | OSHA PEL        | NIOSH REL           |
|---------------------|------------------------------|-----------------|---------------------|
| Silicagel           | 3 mg/m <sup>3</sup> as resp. | Not established |                     |
| Potassium hydroxide | 2 mg/m <sup>3</sup>          | Not established | 2 mg/m <sup>3</sup> |

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White  
 SHAPE : Solid (powder)  
 ODOR : No data available  
 pH : Strong base (in water)  
 BOILING POINT : No data available  
 MELTING POINT : No data available  
 FLASH POINT : No data available  
 EXPLOSIVE LIMITS : No data available  
 VAPOR PRESSURE : No data available  
 VAPOR DENSITY : No data available  
 SPECIFIC GRAVITY : No data available  
 SOLUBILITY IN : Insoluble  
 PARTITION COEFFICIENT ; n-octanol/water : No data available  
 AUTOIGNITION TEMPERATURE : No data available

10. STABILITY AND REACTIVITY

REACTIVITY : Stable under recommended storage conditions.  
 CHEMICAL STABILITY : Hygroscopicity. Potassium hydroxide is easy to absorb moisture.  
 CONDITION TO AVOID : Sunlight, heat, open flames, high temperature, moisture, carbon dioxide, contact with incompatible materials.  
 INCOMPATIBLE MATERIALS : Acidic materials, oxidants, reductants  
 HAZARDOUS DECOMPOSITION PRODUCTS : No data available

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY -oral- : rat: LD50=9,466 mg/kg(calculated)  
 SKIN CORROSION/IRRITATION : (KOH) Corrosion in rabbit and Human (SIDS,2001).  
 EYE DAMAGE/EYE IRRITATION : (KOH) Non-invertible injury to Human and corrosion in rabbit (SIDS,2001).  
 SENSITIZATION : No data available  
 GERM CELL MUTAGENICITY : (KOH) Negative (SIDS,2001)  
 CARCINOGENICITY : No data available  
 REPRODUCTIVE TOXICITY : No data available  
 SPECIFIC TARGET ORGAN TOXICITY - single exposure - : (KOH) If inhalation, nose irritation and burn injury in bronchi (SIDS(2001), AC GIH(2001), PATTY(5th,2001)).  
 ASPIRATION TOXICITY : (KOH) If inhaled, result in death by pneumonia (ACGIH,2001)

12. ECOLOGICAL INFORMATION

ECOTOXICITY : No data available  
 BIODEGRADABILITY : No data available  
 BIOACCUMULATION POTENTIAL : No data available  
 MOBILITY IN SOIL : No data available  
 OTHER ADVERSE EFFECTS : Not listed in Montreal Protocol list.

13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

14. TRANSPORT INFORMATION

IATA  
 UN NUMBER : 3262  
 UN PROPER SHIPPING NAME : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S  
 (Potassium hydroxide Silicagel)  
 CLASS : Class 8, corrosive solid  
 PACKING GROUP : III  
 ADR/RID : 3262, Corrosive Solids  
 DOT : 3262, Corrosive Solids  
 MARINE POLLUTANT : Not classified

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**15. REGULATORY INFORMATION**

US REGULATIONS : Labeling according to EC Directives; See section 2

EU REGULATIONS : Labeling according to EC Directives; See section 2

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**16. OTHER INFORMATION****NOTICE:**

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

**Attention:**

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.