Safety Data Sheet

Potassium Hydroxide Solution, 20% in DMSO, 36%

Revision Date 1/1/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Potassium Hydroxide, 20% in DMSO, 36%
Product code: 400526

Supplier:
EDM 3, LLC
3611 St Johns Bluff Road, Suite 1
Jacksonville, FL 32224
800-638-2625
Monday-Friday: 8:00 -5:00 PM

Synonym: None.
Material uses: Laboratory Reagent.
Validation date: 1/1/2020
In case of a medical emergency or a spill, call: INFOTRAC at 1-800-535-5053 (Domestic within the USA and Canada) or 1-352-323-3500 (International callers may call collect), 24 hours/day, 7 days/week.

2. HAZARDS IDENTIFICATION

Emergency Overview
OSHA, GHS Classification: Acute Toxicity (oral) 4, Skin corr. 1B, Eye damage 1

GHS Label Elements

Signal word: Danger!

Hazard Statement(s):
H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
H402: Harmful to aquatic life

Precautionary Statement(s):
P264: Wash exposed skin thoroughly after handling
P280: Wear protective gloves, protective clothing, eye protection, face protection
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305+351+338: if in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification
Health hazard: 3
Flammability: 1
Physical hazards: 0
NFPA Rating
Health hazard: 3
Fire: 1
Reactivity Hazard: 0

Potential Health Effects

Inhalation - May be harmful if inhaled. Causes respiratory tract burns and irritation.
Skin - May be harmful if absorbed through skin. Causes skin burns and irritation.
Eyes – Will burn eyes on contact
Ingestion – Harmful/toxic if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number		% by weight
Dimethyl Sulfoxide	67-68-5		36
Potassium Hydroxide	1310-58-3	20	
Water	7732-18-5		Balance

4. FIRST AID MEASURES

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact: In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms occur.

Ingestion: Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

5. FIRE-FIGHTING MEASURES

Flammability of the product: Product is not flammable

Extinguishing media: Use an extinguishing agent suitable for the surrounding fire

Not suitable: None known.

Special exposure hazards: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products: Oxides of potassium

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental cautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal. Dilute with water and mop up if water-soluble or absorb with an inert dry

material and place in an appropriate waste disposal container

7. HANDLING AND STORAGE

Handling: Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits. CEIL ACGIH, NIOSH, 2mg/m_3

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Color: Colorless

Odor: Odorless.

pH: Not available

Boiling/condensation point: ~190°C (212°F).

Melting/freezing point: Not available.

Relative density: Not available

Vapor pressure: Not available.

Vapor density: Not available.
Odor threshold: Not available.
Evaporation rate: Not available
VOC : Not available
Solubility: Complete in water

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid: If mixed with strong acids will cause splattering and heat, metals
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

LD50 oral rat: 1476 mg/kg (Potassium Hydroxide 20%)

Carcinogenicity: No known significant effects
Mutagenicity: No known significant effects
Teratogenicity: No known significant effects

Material is destructive to tissue of the mucous membrane and upper respiratory tract including eyes and skin.

12. ECOLOGICAL INFORMATION

Potassium Hydroxide:
LC50 fishes 1: >28.6 mg/l (9h; Pisces; Lethal)
LC50 fish 2: 80 mg/l (Gambusia affins)
TLM fish 1: 80 ppm (24 h; Gambusia affinis)

Environmental effects: Not biodegradable as it is not an organic compound capable of decomposition. However, the material would be neutralized by acidity present in the natural environment

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT: IMDG: IATA: UN1814, Potassium Hydroxide Solution, Class 8, PG II

15. REGULATORY INFORMATION

United States RQ 1000 lbs

OS**HA Classification:** Meets criteria for hazardous material as defined by 29 CFR 1910.1200

U.S. Federal regulations: TSCA Listed on inventory CAS
SARA 302 RQ/TPQ 1000lbs/No products were found.
SARA 313: No chemicals for this mixture are reportable
Clean Air Act: No products were found.
Clean Water Act: CAS1310-56-3 is listed, not as a priority or toxic pollutant

DEA List I Chemicals
(Precursor Chemicals): Not listed
DEA List II Chemicals
(Essential Chemicals): Not listed

Massachusetts RTK: CAS1310-56-3 listed.
New Jersey RTK: CAS1310-56-3 listed.
Pennsylvania RTK CAS1310-56-3 listed.
California Prop 65 Not Listed

Canada
WHMIS (Canada): This product is listed on the Domestic Substance Act CAS1310-56-3
Canadian lists: CEPA Toxic substances: Class D1B Poisonous and infectious material-immediate and serious effects- Toxic, E-Corrosive

CEPA DSL / CEPA NDSL: All components are listed or exempted.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations
International lists:
Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): Not determined.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): All components are listed or exempted.

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)

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