



LABORATORY CHEMICALS AND CONSUMABLES
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MATERIAL SAFETY DATA SHEET

POTASSIUM HYDROXIDE 0.5N

1. Chemical Product and Company information.

Product name: Potassium Hydroxide. 0.5N (alcoholic)

Contact Information:

Radchem cc
PO Box 166982
Brackendowns
Alberton 1454
Telephone : **011 867 3726 / 2864**

2. Hazard Identification

Very hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

3. Composition / information on ingredients

CAS #: Mixture

Synonym:

Chemical Name: Not applicable

Chemical Formula: Not applicable

4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact: If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.



Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention

Serious Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion: Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available

5. Fire-fighting measures

Flammability of the Product: Flammable.

Fire Hazards in Presence of Various Substances: Highly flammable in presence of open flames and sparks, of heat, of combustible materials.

Explosion Hazards in Presence of Various Substances: Non Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Flammable liquid, soluble or dispersed in water. **SMALL FIRE:** Use DRY chemical powder. **LARGE FIRE:** Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards: Explosive in the form of vapour when exposed to heat or flame. Vapour may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes. **CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME (Methyl alcohol)**

Special Remarks on Explosion Hazards: Not available

6. Accidental release measures

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid.

Large Spill: Flammable liquid. Corrosive liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapour drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Neutralize the residue with a dilute solution of acetic acid. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and storage

Precautions: Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Never add water to this product In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes Keep away from incompatibles such as oxidizing agents, acids.



Storage: May corrode metallic surfaces. Store in a metallic or coated fibreboard drum using a strong polyethylene inner package. Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C

8. Exposure controls/personal protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Face shield. Full suit. Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapour respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. Physical and chemical properties

Physical state and appearance: Liquid

Odour: Not available

Taste: Not available

Colour: Not available

Boiling Point: The lowest known value is 64.5°C (148.1°F) (Methyl alcohol)

Melting Point: May start to solidify at -97.8°C based on data for: Methyl alcohol

Critical Temperature: Not available

Specific Gravity: Weighted average: 0.81 (Water = 1)

Vapour Density: The highest known value is 1.11 (Air = 1) (Methyl alcohol)

Volatility: Not available

Odour Threshold: The highest known value is 160 ppm (Methyl alcohol)

Ionicity (in Water): Not available.

Dispersion Properties: Is not dispersed in methanol, diethyl ether. See solubility in water, methanol, and diethyl ether.

Solubility: Easily soluble in cold water, hot water, methanol, diethyl ether.

10. Stability and reactivity

Stability: Unstable

Instability Temperature: Not available.

Conditions of Instability: Not available

Incompatibility with various substances: Highly reactive with oxidizing agents. Reactive with acids. Slightly reactive to reactive with moisture

Corrosivity: Highly corrosive in presence of aluminium. Non-corrosive in presence of glass.



Special Remarks on Reactivity: Not available

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

11. Toxicological information

Routes of Entry: Eye contact. Inhalation. Ingestion

Toxicity to Animals: WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 273 mg/kg [Rat]. (Potassium hydroxide). Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit.]. (Methyl alcohol). Acute toxicity of the vapour (LC50): 64000 ppm 4 hour(s) [Rat.]. (Methyl alcohol).

Chronic Effects on Humans: DEVELOPMENTAL TOXICITY: PROVEN [Methyl alcohol] The substance is toxic to lungs, mucous membranes, the nervous system, the reproductive system.

Other Toxic Effects on Humans: Very hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available

Special Remarks on Chronic Effects on Humans: 0040 Passes through the placental barrier. May be fatal or cause blindness if swallowed. (Methyl alcohol)

Special Remarks on other Toxic Effects on Humans: Narcotic. (Methyl alcohol)

12. Ecological information

Ecotoxicity: Not available

BOD5 and COD: Not available

Products of Biodegradation: Possibly hazardous short/long term degradation products are to be expected

Toxicity of the Products of Biodegradation: The products of degradation are more toxic

Special Remarks on the Products of Biodegradation: Not available

13. Disposal considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

DOT Classification: Class 3: Flammable liquid

Identification : Flammable liquid, corrosive, n.o.s. (Methanol; Potassium hydroxide, solution) (Methyl alcohol) : UN2924 PG: II

Special Provisions for Transport: Not available

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