

MSDS • Potassium Iodide

Loose in the Lab, Inc.
9462 South 560 West
Sandy, Utah 84070

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SECTION 1 • CHEMICAL PRODUCT

Potassium Iodide

SECTION 2 • COMPOSITION, INFORMATION ON INGREDIENTS

Polyvinyl Alcohol	CAS#: 7681-11-0	% by Weight: 100		
Health-1	Flammability-0	Reactivity-0	Exposure-0	Storage-0

SECTION 3 • HAZARDS IDENTIFICATION

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 4 • FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.



SECTION 5 • FIRE FIGHTING MEASURES

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some hazardous decomposition products are: Hydrogen Iodide, Oxides of potassium , iodine

Fire Hazard:

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 6 • ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION 7 • HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. est. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

Storage: Moisture Sensitive. Light Sensitive. Air Sensitive Keep container tightly closed in light-resistant containers. Keep container in a cool, well-ventilated area.

SECTION 8 • EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved / certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust 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.

Exposure Limits: Not available.

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Solid. (Deliquescent crystals solid.)

Odor: Odorless.

Taste: Bitter. Saline. (Strong.)

Molecular Weight: 166 g / mole

Color: White.

pH (1% soln / water): Not available.

Boiling Point: 1330°C (2426°F)

Melting Point: 681°C (1257.8°F)

Critical Temperature: Not available.

Specific Gravity: 3.1 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, acetone.

Solubility: Easily soluble in cold water, hot water. Soluble in methanol. Partially soluble in acetone.

SECTION 10 • STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Light, moisture, incompatible materials. It is stable under ordinary conditions of use and storage. On long exposure to air, it becomes yellow due to release of iodine.

Incompatibility with various substances: Reactive with oxidizing agents, reducing agents, organic materials, metals, acids.

Corrosivity: Corrosive in presence of steel, of aluminum, of zinc. Non-corrosive in presence of glass, of copper, of stainless steel(304), of stainless steel(316).

Special Remarks on Reactivity: Moisture Sensitive. Light Sensitive. Air Sensitive. Air causes decomposition to iodine. Reacts violently with strong oxidizers, bromotrifluorides, chlorotrifluorides, fluorine perchlorate, metallic salts. Attacks metals in moist environments. Also incompatible with salts of alkaloids, chloral hydrate, calomel (mercurous chloride), potassium chlorate, tartaric and other acids, oxidants, diazonium salts, charcoal, ozone, strong reducers, alkali metals, metals (brass, aluminum magnesium, zinc, cadmium, copper, tin, nickel, steel), metallic salts, organic materials, light.

Special Remarks on Corrosivity: Incompatible with water, producing a corrosive. Corrosive in all concentrations to most metals, except stainless steel, titanium, and tantalum.

Polymerization: Will not occur.

SECTION 11 • TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 14700 mg/kg [Mouse]. Acute oral toxicity (LD50): > 20000 mg/kg [Rat].

Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.

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

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause cancer (tumorigenic) based on animal studies. No human data found at this time.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Ingestion: May cause gastrointestinal (digestive) tract irritation. May affect behavior/central nervous system (symptoms may include general depressed activity, altered sleep time, muscle weakness). May also affect blood and metabolism. Inhalation: May cause respiratory tract irritation. Chronic Potential Health Effects: Inhalation or ingestion for prolonged period of time may affect blood and metabolism, and behavior. May cause cancer (tumorigenic) based on animal studies. No human data found at this time.

SECTION 12 • ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic. Special Remarks on the Products of Biodegradation: Not available.

SECTION 13 • DISPOSAL CONSIDERATIONS

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

SECTION 14 • TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

SECTION 15 • REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Potassium Iodide

SECTION 16 • OTHER INFORMATION

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