



Safety Data Sheet

1. IDENTIFICATION

Product Identifier: Potassium Iodide Solution

Product Code(s): P1018, P1021, P1051, P1052, P1065, P1090

Synonyms: Potide Solution

Recommended Use: For manufacturing, industrial, and laboratory use only. Use as a catalyst, as a solvent, or as

a laboratory reagent.

Uses Advised Against: Not for food, drug, or household use.

Supplier: Rocky Mountain Reagents, Inc.

4621 Technology Drive, Golden, CO 80403 Phone: (303) 762-0800 Fax: (303) 762-1240

Emergency Phone Number: For health emergency, call poison control: (800) 222-1222.

2. HAZARDS IDENTIFICATION

Hazard Classifications: This product is classified as not hazardous under OSHA's Hazard Communication

Standard, 29 CFR 1910.1200 (HCS) and the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS). However, all chemicals handled and

used in the workplace should be treated with caution.

Signal Word: Not applicable.

Hazard Statements: Not applicable.

Pictograms: Not applicable.

Precautionary Statements:

Prevention: Not applicable.

Response: Not applicable.

Storage: Not applicable.

Disposal: Not applicable.

Hazards Not Otherwise

Classified:

Prolonged or repeated exposure to this product may cause thyroid effects and reproductive

effects.

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 1/7

Toxicity Statement: Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Component | Common Name / Synonyms | CAS# | Chemical Formula | % by Weight |
|------------------|------------------------|-----------|------------------|-------------|
| Water | Water | 7732-18-5 | H ₂ O | 63.1 – 98.4 |
| Potassium Iodide | Potide | 7681-11-0 | KI | 1.63 – 36.9 |

Trade Secret Statement: Not applicable.

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial

respiration. Call a physician if symptoms occur.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs,

keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a physician or poison control center if symptoms occur.

Skin Contact: Wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated

clothing and shoes. Wash clothing before reuse. Call a physician if symptoms occur.

Eye Contact: Check for and remove contact lenses, if present and easy to do. Immediately flush eyes with

gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids

occasionally. Call a physician if symptoms occur.

General Advice: Poison information centers in each state can provide additional assistance for scheduled

poisons. Ensure that those providing first aid and medical personnel are aware of the

material(s) involved and take precautions to protect themselves.

Symptoms and Effects: Irritation, coughing, sneezing, shortness of breath, fever, headache, skin rashes. May be

harmful if swallowed, inhaled, or exposed to the eyes. May cause irritation if exposed to the skin or eyes. Prolonged of repeated exposure may cause iodism, thyroid damage, and

reproductive effects.

Immediate Medical Care/

Special Treatment:

Call a physician or poison control center if you feel unwell or are concerned. Treat

symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water spray, dry powder, alcohol resistant foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream, as it may scatter and spread fire.

Hazardous Combustion

Products:

Potassium oxides, hydrogen iodide.

Specific Hazards: Excessive thermal conditions may cause decomposition and yield hazardous combustion

products listed above.

Special Protective Equipment/

Precautions for Firefighters:

As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained positive-

pressure or pressure-demand breathing apparatus and full protective gear.

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 2/7

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment:

Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Wear appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing.

Emergency Procedures:

In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).

Methods for Containment:

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover liquid when possible.

Methods for Cleanup:

Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a non-combustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Residues from spills can be diluted with water. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Handling: Wear personal protective equipment (see Section 8). Avoid contact with skin, eyes, and

clothing. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Limit exposure to light. Limit exposure to air. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain

product residues. Observe all warnings and precautions listed for this product.

Storage: Store in a cool, dry, ventilated area. Store away from heat and incompatible materials (see

Section 10). Store in original container. Keep containers tightly closed and upright. Keep out of light. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling,

dispensing, and disposal of this product.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: Water: No information found.

Potassium Iodide: ACGIH (TLV): 0.01 ppm

Engineering Controls: Ensure adequate ventilation. Ventilation rates should be matched to conditions. If

applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not

been established, maintain airborne levels to an acceptable level.

Personal Protective Measures:

Eye/Face Protection: Wear safety glasses with side shields or goggles. Maintain approved eye wash station and

accessible rinse facilities in work area.

Skin Protection: Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical

resistant gloves.

Respiratory Protection: An air-purifying, NIOSH-approved respirator with an organic vapor cartridge or canister may

be permissible under certain circumstances where airborne concentrations are expected to

exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 3/7

potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection.

Specific Requirements for Personal Protective Equipment:

Ensure that glove material is compatible with this product. This information is available from

glove manufacturers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Unless otherwise indicated, all properties are given at 25 °C and standard pressure.

Appearance: Colorless, transparent liquid.

Odor: Odorless.

Odor Threshold: No information found.

Formula Weight: 166.00 as potassium iodide

pH: $\approx 6.9 (5\% \text{ w/v solution at } 20 ^{\circ}\text{C})$

Melting/Freezing Point: No information found.

Boiling Point/Range: No information found.

Decomposition Temperature: No information found.

Flash Point: Not applicable.

Auto-ignition Temperature: Not applicable.

Flammability: Not flammable.

Flammability/Explosive Limits: Not applicable.

Solubility: Miscible with water. Soluble in methanol.

Vapor Pressure:No information found.Vapor Density:No information found.Specific Gravity:1.01 – 1.36 (Water = 1)Evaporation Rate:No information found.

Viscosity: No information found.

Partition Coefficient No information found.

(n-octanol/water):

10. STABILITY AND REACTIVITY

Reactivity Data: No information found.

Chemical Stability: Stable under normal conditions. Sensitive to light and air.

Conditions to Avoid: Excessive heat, exposure to air, exposure to light, incompatible materials.

Incompatible Materials: Oxidizers, reducing agents, organic materials, metals, acids.

Hazardous Decomposition

Products:

Potassium oxides, hydrogen iodide, iodine.

Possibility of Hazardous

Reactions:

May react vigorously or violently with the incompatible materials listed above. Excessive thermal conditions may cause decomposition and yield potassium oxides and hydrogen

iodide. Contact with air or light may cause decomposition and yield iodine.

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 4/7

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Inhalation, ingestion, skin contact, eye contact.

Acute Effects: May be harmful if swallowed, inhaled, or exposed to the eyes. May cause irritation if

exposed to the skin or eyes.

Chronic Effects: Prolonged of repeated exposure may cause iodism, thyroid damage, and reproductive

effects.

Toxicological Data: Water: Not applicable.

Potassium Iodide: No information found.

Symptoms of Exposure: Irritation, coughing, sneezing, shortness of breath, fever, headache, skin rashes.

Carcinogenic Effects: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological Data: Water:

Not applicable.

Potassium Iodide:

LC₅₀, Rainbow Trout (Oncorhynchus mykiss): 3200 mg/L 120 h

Persistence and Degradability: No information found.

Environmental Effects: Not expected to be hazardous to the environment. However, the possibility of an

environmental hazard cannot be excluded in the event of unprofessional handling or

disposal.

13. DISPOSAL INFORMATION

Disposal Instructions: Dispose of this material and its container to an approved waste collection point. Minimize

exposure to product waste (see Section 8). Do not dispose unused waste down drains or into sewers. All wastes must be handled in accordance with local, state, and federal

regulations.

Contaminated Packaging: Because emptied containers may retain product residue, follow label warnings even after

container is emptied. Offer rinsed packaging material to local recycling facilities.

Waste Codes: No information found.

14. TRANSPORT INFORMATION

DOT: Not regulated.

Environmental Hazard

Regulations:

No information found.

Other Transport Precautions: No information found.

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 5/7

15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA: This product is not considered a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Inventory: All components of this product are on the U.S. TSCA Inventory.

U.S. EPCRA (SARA Title III):

Section 302: No information found.

Sections 311/312:

| Hazard Category | List (Yes/No) | |
|----------------------------------|---------------|--|
| Section 311 – Hazardous Chemical | No | |
| Immediate Hazard | No | |
| Delayed Hazard | No | |
| Fire Hazard | No | |
| Pressure Hazard | No | |
| Reactivity Hazard | No | |

CERCLA Reportable Quantities: No information found.

International Inventories:

| Country or Region | Inventory Name | On Inventory (Yes/No)* |
|-------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | N/A |
| Canada | Domestic Substances List (DSL) | N/A |
| Canada | Non-Domestic Substances List (NDSL) | N/A |
| China | Inventory of Existing Chemical Substances in China (IECSC) | N/A |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | N/A |
| Europe | European List of Notified Chemical Substances (ELINCS) | N/A |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | N/A |
| Korea | Existing Chemicals List (ECL) | N/A |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | N/A |

^{*}A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s).

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 6/7

16. OTHER INFORMATION

Disclaimer:

Rocky Mountain Reagents, Inc. provides the information in this Safety Data Sheet in the belief that it is reliable but assumes no responsibility for its completeness or accuracy. The physical properties reported in this SDS are obtained from literature and do not constitute product specifications. Rocky Mountain Reagents, Inc. makes and gives no representations or warranties with respect to the information contained herein or the product to which it refers, whether express, implied, or statutory, including without limitation, warranties of accuracy, completeness, merchantability, non-infringement, performance, safety, suitability, stability, and fitness for a particular purpose. No warranty against infringement of any patent, copyright or trademark is made or implied. This SDS is intended only as a guide to the appropriate handling of the material by a properly trained person. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. Accordingly, Rocky Mountain Reagents, Inc. assumes no liability whatsoever for the use of or reliance upon this information including results obtained, incidental or consequential damages, or lost profits.

Issue Date: May 19, 2016

Reason for Revision: Update of Section 9 over 03/15/2016 version.

Product: Potassium Iodide Solution

Revision Date: 05/19/2016 7/7