Material Safety Data Sheet

Section 1: Chemical Product and Company Identification

Catalog Number:
4765

Product Identity:
MERCURIC - POTASSIUM IODIDE TS, MAYER'S REAGENT

Manufacturer's Name: RICCA CHEMICAL COMPANY LLC	**Emergency Contact(24 hr) --** CHEMTREC® Domestic: 800-424-9300 International: 703-527-3887
CAGE Code: 4TCW6, 0V553, 4XZQ2	
Address: 448 West Fork Dr Arlington, TX 76012	**Telephone Number For Information:** 817-461-5601
Date Prepared: 6/29/99	**Revision:** 2 Last Revised: 09/13/2001 Date Printed: 10/01/2014 4:32:57 pm

Section 2. Composition/Information on Ingredients

Component	CAS Registry #	Concentration	ACGIH TLV	OSHA PEL
Mercuric Chloride	7487-94-7	1.3 - 1.4	Not Available 0.025 mg/m3	Not Available C 0.1 mg/m3
Potassium Iodide	7681-11-0	4 - 6	Not Available Not Available	Not Available Not Available
Water, Deionized	7732-18-5	Balance	Not Available Not Available	Not Available Not Available

Section 3: Hazard Identification

Emergency Overview: WARNING! May be fatal if swallowed. May cause irritation to the skin, eyes, gastrointestinal tract, central nervous system and respiratory tract. If ingested, give large quantity of water. Induce vomiting. Call a physician immediately. Wash areas of contact with plenty of water for at least 15 minutes. Mercury compounds affect the kidneys and central nervous system .

Target Organs: eyes, skin, respiratory system, gastrointestinal tract, central nervous system, kidneys.

Eye Contact: May cause irritation, redness, pain, and tearing.

Inhalation: Raw materials may cause irritation, however this solution is not likely to be hazardous by inhalation.

Skin Contact: May irritate damaged skin, absorption can occur with effects similar to those via ingestion .

Ingestion: Toxic! May cause severe gastroenteritis, including abdominal pain, vomiting and diarrhea. May be followed by a rapid and weak pulse, shallow breathing, paleness, exhaustion, central nervous system problems, tremors and collapse. Delayed death may occur from renal failure.

Chronic Effects/Carcinogenicity: Chronic exposure can lead to central nervous system damage.

IARC - Mercuric Chloride is unclassifiable as to carcinogenicity to humans. Mercuric Chloride is unclassifiable as to carcinogenicity to humans.

NTP - No.

OSHA - No.

Reproductive Information: Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Potassium Iodide. Reproductive effects cited in 'Registry of Toxic Effects of Chemical Substances' for Mercuric Chloride. Reproductive effects cited in 'Registry of Toxic Effects of Chemical

Teratology (Birth Defect) Information: Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Potassium Iodide. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Mercuric Chloride. Mutation data cited in 'Registry of Toxic Effects of Chemical Substances'

Section 4: First Aid Measures - In all cases, seek qualified evaluation.

Eye Contact: Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

Skin Contact: Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops.

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

Section 5: Fire Fighting Measures

Flash Point: Not Available.

Method Used: Not Available.

LFL: Not Available.

UFL: Not Available.

Extinguishing Media: Use any means suitable for extinguishing surrounding fire. Dry chemical or foam may suffice for small fires. For large fires, try fog or regular foam. Exercise caution if water is used (it may increase contamination of area).

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard. Heat of reaction can accelerate the combustion of ordinary combustible materials.

Fire Fighting Instructions: Poisonous gases are produced in fire. Continue to cool containers with water after fire is extinguished. For larger fires, use unmanned hose apparatus, if possible. Consider down wind conditions. Do not release runoff from fire-fighting measures to sewers or waterways.

Fire Fighting Equipment: Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

Section 6: Accidental Release Measures

Wear gloves to protect from absorption through skin. Absorb with suitable material and containerize for proper disposal. Do not flush to sewer. Sprinkle area with Sulfur to suppress Mercury.

Section 7. Handling and Storage

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

Safety Storage Code: Health

Section 8: Exposure Control/Personal Protection

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Section 9: Physical and Chemical Properties

Appearance: Clear, colorless liquid

pH: 5 - 7

Odor: Odorless

Boiling Point(°C): Approximately 101

Solubility in Water: Infinite

Melting Point(°C): Approximately 0

Specific Gravity: Approximately 1

Vapor Pressure: Not Applicable.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatibility: Formates, Sulfites, Phosphates, Albumin, Ammonia, Gelatin, Carbonates, Hypophosphites, Sulfides, Alkalis, Alkaloid salts, Lime water.

Hazardous Decomposition Products: Can emit toxic fumes and gases when heated to decomposition including Mercury.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

LD50, Oral, Rat: 1 mg/kg (Mercuric Chloride); LD50, Dermal, Rat: 41 mg/kg (Mercuric Chloride), details of toxic effects not reported other than lethal dose value . Mercuric Chloride and Potassium Iodide are investigated as a mutagen and reproductive effector .

Section 12. Ecological Information

Ecotoxicological Information: Mercuric Chloride has high acute and chronic toxicity to aquatic life.

Chemical Fate Information: Mercury is highly persistent in water with a half-life greater than 200 days. When released into water, microorganisms convert Mercuric salts into Methyl Mercury which is rapidly taken up by algae and enters the food chain. It concentrates in the edible tissues of fish and, eventually, can cause human poisoning as well. This material is expected to significantly bioaccumulate.

Section 13. Disposal Considerations

Containerize for proper disposal with a RCRA approved hazardous waste facility . Do not flush to the sewer. Always dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

Part Numbers: 4765-16, 4765-32

D.O.T. Shipping Name: Toxic Liquid, Inorganic, n.o.s., (Mercuric Chloride)
D.O.T. Hazard Class: 6.1
U.N. / N.A. Number: UN3287
Packing Group: III
D.O.T. Label: III

Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)

OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

Section 311/312 Hazardous Catagories: Acute, Chronic: Yes Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: Mercuric Chloride is listed as an Environmental Hazard on the state's Hazardous Substances List. Mercuric Chloride is listed as an Environmental Hazard on the state's Hazardous Substances List.

RCRA Status: Not Applicable.

CERCLA Reportable Quantity: None Reported.

WHMIS: D-1B Poisonous and Infectious Material. Materials causing immediate and serious toxic effects - Toxic Material. D-2B: Poisonous and Infectious Material. Materials causing other toxic effects - Toxic Material.

Section 16. Other Information

NFPA Ratings:

Health: 2	Flammability: 0	Reactivity: 0	Special Notice Key:None

HMIS Ratings:

Health: 2	Flammability: 0	Reactivity: 0	Protective Equipment:B (Protective Eyewear, Gloves)

Rev 1, 9-22-2000: Reformatted from WordPerfect® to Microsoft Word®; (Section 1) Revised emergency telephone number to CHEMTREC® 800-424-9300; (Section 11) added dermal information; (Section 12) expanded chemical fate information; (Section 15) added California listing; (Section 16) revised Health ratings from 3, due to low level of Mercury present.

Rev 2, 10-09-2001: Reformatted to electronic data format.

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.