



PO Box 329 • 802 Washington Avenue • Chestertown, MD 21620 • USA
 Telephone Number For Information 410-778-3100

24 Hour Emergency Number (CHEM-TEL) 800-255-3924

MSDS

Material Safety Data Sheet

1. Product Identification

Product Code:
Product Description:

V-4798
 Ammonia Nitrogen Reagent #2
 (Nessler Reagent)

Manufactured By:

LaMotte Company
 802 Washington Avenue
 Chestertown, MD 21620

2. Composition/Information on Ingredients

| Hazardous | Name | CAS # | % | OSHA PEL | ACGIH TLV |
|-----------|---------------------|-----------|---------|--------------|---------------------------|
| Yes | Potassium Hydroxide | 1310-58-3 | 15 | C2mg/cubic m | C 2 mg/cubic m |
| Yes | Mercuric Chloride | 7487-94-7 | 3.3 | N/A | 0.1 mg/cubic m (as Hg) |
| Yes | Potassium Iodide | 7681-11-0 | 6 | N/A | N/A |
| No | Water | 7732-18-5 | To 100% | | |

3. Hazards Overview

Primary Route of Entry: Inhalation Skin

Poison! Danger! Corrosive. Severe burns. Vapors irritating to respiratory tract. Corrosive to eyes and skin. Toxic if swallowed.

HMIS Hazard: (Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least)

Health: 3 Flammability: 0 Reactivity: 2

Carcinogenicity: None

Other Health Related Comments:

Mercuric chloride can have toxic effects on the nervous system. Investigated as a tumorigen, mutagen, reproductive effector (possible teratogen). All forms of mercury can cross the placenta to the fetus.

4. First Aid Measures

Eye Contact: Immediately flush with water for 15 minutes. Get prompt medical attention.

Skin Contact: Immediately flush with water for 15 minutes while removing affected clothing and shoes. Consult physician.

Ingestion: Do not induce vomiting. Rinse out mouth. Drink plenty of water. Call a doctor immediately!

Inhalation: Remove to fresh air.

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5. Fire Fighting Measures

Flash Point: N/A **LEL:** N/A **UEL:** N/A

Fire Rating

Extinguishing Media: Not a fire hazard
Special Fire Fighting Procedures: N/A
Hazardous Combustion and/or Decomposition Products: N/A
Unusual Fire & Explosion Hazard: N/A

6. Accidental Release Measures

Absorb on inert material (vermiculite) or spill pads. Place into a clean, dry plastic pail and cover with lid. Dispose of as hazardous waste. Do not pour down sinks and drains.

7. Handling & Storage

Store in cool, dry, storage area away from incompatible materials.

8. Exposure Controls/Personal Protection

Ventilation

Use with adequate ventilation.

Protection When Handling

Gloves Eye Protection Lab Coat

Work/Hygienic Practices: No eating or smoking while handling. Wash after handling. Avoid contact w/ skin & clothing.

9. Physical & Chemical Properties

Appearance: Clear Light-yellow Liquid

Odor: None

Solubility in Water: Soluble

Boiling Point: >100 deg C

Melting Point: N/A

pH: 14

Vapor Density: Unknown

Vapor Pressure: Unknown

10. Stability & Reactivity

Stable: Yes

Conditions to Avoid: heat

Materials to Avoid: Finely powdered metals, strong acids, ammonia

Hazardous Decomposition Products: N/A

11. Toxicological Information

For mercuric chloride solid--oral rat LD50: 1 mg/kg; skin rat LD50: 41 mg/kg; oral human LDLo: 29 mg/kg

For potassium hydroxide solid--oral rat LD50: 273 mg/kg. Investigated as a mutagen.

Target Organs: Corrosive to all body parts

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12. Ecological Information

Environmental Fate:

For Mercury: Mercuric chloride has an experimentally determined bioconcentration factor (BCF) of greater than 100. This material is expected to significantly bioaccumulate.

Environmental Toxicity:

For Mercury: This material is expected to be toxic to aquatic life. The LC50/96-hour values for fish are less than 1 mg/l.

13. Disposal Considerations

Free liquid waste may be treated with ammonium hydroxide to precipitate the mercury compounds; the precipitated mercury "sludge" must be disposed of as hazardous waste. Under U.S. law even small amounts of mercury may not be disposed of to sewers or water courses. We recommend direct disposal of #4798 reagent to a licensed hazardous waste facility in accordance with federal, state and local regulations.

14. Transport Information

Domestic (D.O.T.)

Proper Shipping Name: CORROSIVE LIQUIDS, TOXIC, N.O.S. (Potassium Hydroxide/Mercuric Chloride)

Hazard Class/Div: 8, 6.1

UN 2922

Packing Group: II

International (I.A.T.A.)

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Potassium Hydroxide/Mercuric Chloride)

Hazard Class/Div: 8, 6.1

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15. Regulatory Information**Chemical Inventory Status**

| Ingredient | USA | Europe | ---Canada--- | | Australia | Japan |
|---------------------------------|-------------|---------------|---------------------|-------------|------------------|--------------|
| | TSCA | EC | DSL | NDSL | | |
| Potassium Hydroxide (1310-58-3) | Yes | Yes | Yes | No | Yes | Yes |
| Mercuric Chloride (7487-94-7) | Yes | Yes | Yes | No | Yes | Yes |
| Potassium Iodide (7681-11-0) | Yes | Yes | Yes | No | Yes | Yes |
| Water (7732-18-5) | Yes | Yes | Yes | No | Yes | Yes |

Federal, State, & International Regulations

| Ingredient | ---SARA 302--- | | ----- SARA 313 ----- | | | RCRA 261.33 | TSCA 8(D) |
|------------------------------------|-----------------------|------------|-----------------------------|--------------------------|---------------|------------------------|----------------------|
| | RQ | TPQ | Listed | Chemical Category | CERCLA | | |
| Potassium Hydroxide (1310-58-3) | No | No | No | No | 1000 | No | No |
| Mercuric Chloride (7487-94-7) | 500 | 500* | Yes | Mercury compound | 1 | No | No |
| Potassium Iodide (7681-11-0) | No | No | No | No | No | No | No |
| Water | No | No | No | No | No | No | No |

| Ingredient | ----- SARA 311/312 ----- | | | ----- Australia ----- | | This MSDS is WHMIS Compliant |
|---|---------------------------------|---|----------|------------------------------|----------------------------|---|
| | Hazard Categories | | | Hazchem Code | Poison Schedule | |
| Potassium Hydroxide (1310-58-3) | Acute: Yes Pressure: No | Chronic: Yes Reactivity: Yes (Pure/Solid) | Fire: No | 2R | S6 | |
| Mercuric Chloride (7487-94-7) | Acute: Yes Pressure: No | Chronic: Yes Reactivity: No (Pure/Solid) | Fire: No | 2X | S7 | |
| Potassium Iodide (7681-11-0) | Acute: Yes Pressure: No | Chronic: Yes Reactivity: No (Pure/Solid) | Fire: No | None allocated | None allocated | |
| For reagent V-4798 liquid mixture as a whole | Acute: Yes Pressure: No | Chronic: Yes Reactivity: Yes (Mixture / Liquid) | Fire: No | ? | ? | Yes |

State Regulations: California—This product contains mercury, a chemical known to the state of California to cause birth defects or other reproductive harm.

16. Other Information**Prepared By: IP****Revised: 3/01/2005**