

LM36425C



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:**

V-4798

**Product Description:**

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

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### **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.

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### **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.

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### **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

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### **10. Stability & Reactivity**

<b>Stable:</b>	Yes
<b>Conditions to Avoid:</b>	heat
<b>Materials to Avoid:</b>	Finely powdered metals, strong acids, ammonia

**Hazardous Decomposition Products:** N/A

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### **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.

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**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.

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**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

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International (I.A.T.A.)

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

**Hazard Class/Div:** 8, 6.1

**UN 2922**

**Packing Group:** II

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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	I	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	Chronic: Yes	Fire: No Pressure: No    Reactivity: Yes (Pure/Solid)	2R	S6	
Mercuric Chloride (7487-94-7)	Acute: Yes	Chronic: Yes	Fire: No Pressure: No    Reactivity: No (Pure/Solid)	2X	S7	
Potassium Iodide (7681-11-0)	Acute: Yes	Chronic: Yes	Fire: No Pressure: No    Reactivity: No (Pure/Solid)	None allocated	None allocated	
For reagent V-4798 liquid mixture as a whole	Acute: Yes	Chronic: Yes	Fire: No Pressure: No    Reactivity: Yes (Mixture / Liquid)	?	?	Yes

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

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