



PO Box 329 • 802 Washington Avenue • Chestertown, MD 21620 • USA

Telephone Number For Information 410-778-3100

24 Hour Emergency Number (CHEM-TEL) : USA, Canada, Puerto Rico 800-255-3924;

Outside North American continent: 813-248-0585 (call collect)

MSDS

Material Safety Data Sheet

1. Product Identification

Product Code:

4841

Product Description:

Hydrazine Reagent A

Manufactured By:

LaMotte Company

802 Washington Avenue

Chestertown, MD 21620

2. Composition/Information on Ingredients

| Hazardous | Name | CAS # | % | OSHA PEL | ACGIH TLV |
|-----------|-------------------|-----------|----|----------------|----------------|
| Yes | Hydrochloric Acid | 7647-01-0 | 9 | C 7 mg/cubic m | C 5 mg/cubic m |
| No | Water to 100% | 7732-18-5 | 91 | | |

3. Hazards Overview

Primary Route of Entry: Ingestion Inhalation Skin

Warning! Corrosive. Can cause severe irritation or burns to eyes, skin and lungs. Harmful if swallowed.

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

Health: 2 Flammability: 0 Reactivity: 1

Carcinogenicity: None

Other Health Related Comments:

4. First Aid Measures

Eye Contact: Flush thoroughly with water for 15 minutes. Consult physician.

Skin Contact: Flush thoroughly with water removing affected clothing. Wash skin with soap and water.

Ingestion: Do not induce vomiting. Drink plenty of water. Consult physician.

Inhalation: Remove to fresh air.

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: Hydrogen chloride gas

Unusual Fire & Explosion Hazard: Contact with metals may release flammable hydrogen gas.

6. Accidental Release Measures

Cover spill with sodium bicarbonate. Scoop up slurry and wash down drain with excess water.

Product Code: 4841

Product Description: Hydrazine Reagent A

7. Handling & Storage

Store in cool, ventilated area--away from heat and incompatible materials (strong bases, metals).

8. Exposure Controls/Personal Protection

Ventilation

Use with adequate ventilation.

Protection When Handling

Gloves Eye Protection Lab Coat

Work/Hygienic Practices: Avoid contact with skin and clothing.

9. Physical & Chemical Properties

| | | | |
|-----------------------------|------------------------|------------------------|------------|
| Appearance: | Colorless Clear Liquid | Boiling Point: | >100 deg C |
| | | Melting Point: | N/A |
| | | pH: | <1 |
| Odor: | Slight chlorine | Vapor Density: | Unknown |
| Solubility in Water: | Soluble | Vapor Pressure: | Unknown |

10. Stability & Reactivity

| | |
|-----------------------------|--|
| Stable: | Yes |
| Conditions to Avoid: | Heat |
| Materials to Avoid: | Strong bases, metals, cyanides, sulfides |

Hazardous Decomposition Products: Hydrogen chloride gas

11. Toxicological Information

Oral rabbit LD50: 900 mg/kg for hydrochloric acid, concentrated. Investigated as a tumorigen, mutagen, reproductive effector.

Target Organs: Corrosive to all body parts.

12. Ecological Information

Information not Available

13. Disposal Considerations

Add slowly to a solution of soda ash and calcium hydroxide. Pour this neutralized solution down drain with excess water. Dispose according to federal, state and local regulations.

14. Transport Information

Proper Shipping Name: HYDROCHLORIC ACID

Hazard Class/Div: 8

UN 1789

Packing Group: II

Product Code: 4841

Product Description: Hydrazine Reagent A

15. Regulatory Information

Chemical Inventory Status

| Ingredient | USA TSCA | Europe EC | ---Canada--- DSL NDSL | | Australia | Japan |
|-------------------|---------------------|----------------------|----------------------------------|----|------------------|--------------|
| Hydrochloric Acid | Yes | Yes | Yes | No | Yes | Yes |

Water to 100%

Federal, State, & International Regulations

| Ingredient | ---SARA 302--- | | ----- SARA 313 ----- | | | RCRA | TSCA |
|-------------------|-----------------------|------------|-----------------------------|--------------------------|---------------|---------------|-------------|
| | RQ | TPQ | Listed | Chemical Category | CERCLA | 261.33 | 8(D) |
| Hydrochloric Acid | 5000 | 500* | Yes | No | 5000 | No | No |

Water to 100%

| Ingredient | ----- SARA 311/312 ----- | ----- Australia ----- | | This MSDS is WHMIS Compliant |
|-------------------|---|------------------------------|----------------------------|---|
| | Hazard Categories | Hazchem Code | Poison Schedule | |
| Hydrochloric Acid | Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Liquid/mixture) | 2R | None Allocated | |

Water to 100%

| | | | | |
|---|--|----|----------------|-----|
| For product #4841 liquid mixture, as a whole | Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Liquid/mixture) | 2R | None allocated | YES |
|---|--|----|----------------|-----|

16. Other Information

Prepared By: IP

Revised: 5/20/2005

MATERIAL SAFETY DATA SHEET

LaMOTTE COMPANY
PO BOX 329 - CHESTERTOWN - MARYLAND - 21620
TELEPHONE # FOR INFORMATION 410-778-3100

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

1. PRODUCT IDENTIFICATION

Hydrazine Reagent B

Code Nr. 4842

2. HAZARDOUS INGREDIENTS

| NAME | CAS # | TSCA # | % | PEL | TLV |
|------|-------|--------|---|-----|-----|
| N/A | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

3. NON-HAZARDOUS INGREDIENTS EXCEPT WATER (7732-18-5)

| NAME | CAS # | % |
|-----------------------------|----------|-----|
| p-Dimethylaminobenzaldehyde | 100-10-7 | >99 |
| | | |
| | | |
| | | |

4. PHYSICAL DATA

| | | | |
|---------------------------------------|---------------------------|---------------------------|---------------------------------|
| <i>Appearance:</i> Off white Crystals | | | |
| <i>Solubility in Water:</i> Slight | <i>Odor:</i> None | <i>Boiling Point:</i> N/A | <i>Melt. Point:</i> 73-75 deg C |
| <i>Vapor Pressure:</i> N/A | <i>Vapor Density:</i> N/A | <i>pH:</i> N/A | |

5. FIRE AND EXPLOSION DATA

| | | |
|---|----------------------------------|-----------------|
| <i>Flash Point (method used)</i> N/A | <i>Flammable Limit: LEL:</i> N/A | <i>UEL:</i> N/A |
| <i>Extinguishing Media:</i> Not a fire hazard | | |
| <i>HMIS Hazard: Health - 1 Flammability - 0 Reactivity - 0 Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Least</i> | | |
| <i>Special Fire Fighting Procedures:</i> N/A | | |
| <i>Unusual Fire & Explosion Hazard:</i> Emits toxic fumes under fire conditions. | | |

6. REACTIVITY DATA

| | |
|---|--|
| <i>Stability:</i> | <i>Conditions to avoid:</i> Heating to decomposition |
| <input checked="" type="checkbox"/> <i>Stable</i> | <i>Incompatibility (Materials to avoid):</i> Strong bases and oxidizers |
| <input type="checkbox"/> <i>Unstable</i> | <i>Hazardous Decomposition Products:</i> CO _x , NO _x |

7. HEALTH HAZARD DATA

| | | | | | |
|--|---|---|-------------------------|---|--------------------------------------|
| <i>Toxicity:</i> orl rat LDLo: 500 mg/kg | | | | | |
| <i>Primary Route of Entry:</i> | <input checked="" type="checkbox"/> <i>Inhalation</i> | <input checked="" type="checkbox"/> <i>Skin</i> | <i>Carcinogenicity:</i> | <input checked="" type="checkbox"/> <i>None</i> | <input type="checkbox"/> <i>NTP</i> |
| | <input type="checkbox"/> <i>Ingestion</i> | <input type="checkbox"/> <i>N/A</i> | | <input type="checkbox"/> <i>OSHA</i> | <input type="checkbox"/> <i>IARC</i> |
| <i>Other Health Related Comments:</i> | | | | | |
| <i>Target Organs:</i> N/A | | | | | |
| <i>Signs and symptoms of exposure:</i> May cause irritation of eyes, skin, respiratory system. Slows down central nervous system. | | | | | |
| <i>Medical Condition Aggravated by Exposure:</i> N/A | | | | | |

8. EMERGENCY FIRST AID PROCEDURES

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|---|
| <i>Eye Contact:</i> Flush with water for 15 minutes. Consult a physician. |
| <i>Ingestion:</i> Induce vomiting. Consult a physician. |
| <i>Inhalation:</i> Remove to fresh air. |
| <i>Skin Contact:</i> Flush with water. Wash skin thoroughly with soap and water. |

9. SPILL AND DISPOSAL PROCEDURES

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| <i>Spill and Leak:</i> Avoid raising dust. Carefully sweep up all spilled material and place in clean, dry glass or plastic container with lid. Dispose as hazardous waste. Wash spill area with water. |
| <i>Disposal:</i> Dissolve in flammable solvent and spray into an incinerator. Dispose according to federal, state and local regulations. |

10. PRECAUTIONARY MEASURES

| | | | | |
|---|---|---|--|--|
| <i>In Handling:</i> | <input checked="" type="checkbox"/> <i>Gloves</i> | <input checked="" type="checkbox"/> <i>Eye Protection</i> | <input type="checkbox"/> <i>N/A</i> | <input checked="" type="checkbox"/> <i>Other:</i> Lab Coat |
| <i>Ventilation</i> | <input checked="" type="checkbox"/> <i>Normal</i> | <input type="checkbox"/> <i>Mechanical</i> | <input type="checkbox"/> <i>Respiratory Protection</i> | |
| <i>Work/Hygienic Practices:</i> Avoid contact with skin or clothing. Do not breathe dust. | | | | |

11. SPECIAL PRECAUTIONS

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|----------------------------|
| <i>Store out of light.</i> |
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DATE: 3/1/03 The above information is believed to be correct but does not claim to be all inclusive and should be used only as a guide.

▲ This is a toxic chemical subject to reporting requirements of section 313 of EPCRA and 40CFR372.