

# Material Safety Data Sheet

Carbohydrazide

EMS Catalog # 12350

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Carbohydrazide, 97%

**Catalog Numbers:** 12350

**Synonyms:** Carbazide; Carbazic Acid, Hydrazide.

**Company Identification:**

Electron Microscopy Sciences

321 Morris Road \* P.O. Box 251

Fort Washington, PA 19034

**For information in North America, call:** 215-646-1566

**For emergencies in the US, call CHEMTREC:** 800-424-9300

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
497-18-7	Carbonic Dihydrazide	97	207-837-2

**Hazard Symbols:** None listed.

**Risk Phrases:** None listed.

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: white powder. **Caution!** The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

**Target Organs:** None.

#### Potential Health Effects

**Eye:** May cause eye irritation. The toxicological properties of this material have not been fully investigated.

**Skin:** May cause skin irritation. The toxicological properties of this material have not been fully investigated.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this

substance have not been fully investigated.

**Chronic:** No information found.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** Not published.

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.)

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Carbonic Dihydrazide	none listed	none listed	none listed

**OSHA Vacated PELs:** Carbonic Dihydrazide: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9 - Physical and Chemical Properties

**Physical State:** Powder

**Appearance:** white

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 3.0

**Evaporation Rate:** Not available.

**Viscosity:** Not available.  
**Boiling Point:** Not available.  
**Freezing/Melting Point:** 153.50 - 156.50 deg C  
**Decomposition Temperature:** Not available.  
**Solubility:** Not available.  
**Specific Gravity/Density:** 1.0200g/cm<sup>3</sup>  
**Molecular Formula:** CH<sub>6</sub>N<sub>4</sub>O  
**Molecular Weight:** 90.09

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation, excess heat, strong oxidants.  
**Incompatibilities with Other Materials:** Oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, oxides of nitrogen, irritating and toxic fumes and gases, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS# :**  
**CAS#** 497-18-7: FF2625000  
**LD50/LC50:**  
Not available.

**Carcinogenicity:**  
CAS# 497-18-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
**Epidemiology:** No information available.  
**Teratogenicity:** No information available.  
**Reproductive Effects:** No information available.  
**Neurotoxicity:** No information available.  
**Mutagenicity:** No information available.  
**Other Studies:** No data available.

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 497-18-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### SARA

#### Section 302 (RQ)

None of the chemicals in this material have an RQ.

#### Section 302 (TPQ)

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None of the chemicals in this product have a TPQ.

### **Section 313**

No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

#### **STATE**

CAS# 497-18-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

### **European Labeling in Accordance with EC Directives**

#### **Hazard Symbols:**

Not available.

#### **Risk Phrases:**

#### **Safety Phrases:**

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water.

#### **WGK (Water Danger/Protection)**

CAS# 497-18-7: 1

#### **Canada - DSL/NDSL**

CAS# 497-18-7 is listed on Canada's DSL List.

#### **Canada - WHMIS**

WHMIS: Not available.

#### **Canadian Ingredient Disclosure List**

#### **Exposure Limits**

## **Section 16 - Additional Information**

**MSDS Creation Date:** 6/26/1998

**Revision #1 Date:** 06/15/2006

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