

Section 1. Product and Company Identification

**Product Name** Carbohydrazide  
**CAS Number** 497-18-7

**Parchem - fine & specialty chemicals**  
**415 Huguenot Street**  
**New Rochelle, NY 10801**  
☎ (914) 654-6800 ☎ (914) 654-6899  
🌐 [parchem.com](http://parchem.com) ✉ [info@parchem.com](mailto:info@parchem.com)

EMERGENCY RESPONSE NUMBER  
CHEMTEL  
Toll Free US & Canada: 1 (800) 255-3924  
All other Origins: 1 (813) 248-0585  
Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**  
**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 4): H302  
Skin irritation (Category 2): H315  
Skin sensitization (Category 1): H317  
Acute aquatic toxicity (Category 2): H401  
Chronic aquatic toxicity (Category 2): H411

**GHS Label Elements**

**Pictograms:**



**Signal word:** WARNING

**Hazard and precautionary statements**

**Hazard statements**

H302: Harmful if swallowed.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H411: Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264: Wash skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment

P280: Wear protective gloves.  
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P321: Specific treatment (see supplemental first aid instructions on this label).  
P330: Rinse mouth.  
P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.  
P362: Take off contaminated clothing and wash before reuse.  
P391: Collect spillage.  
P501: Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC) or not covered by GHS:** Risk of explosion if heated under confinement

### Section 3. Composition / Information on Ingredients

<b>Common Name</b>	Carbohydrazide
<b>Formula</b>	$\text{CH}_6\text{N}_4\text{O}$
<b>CAS Number</b>	497-18-7

### Section 4. First Aid Measures

#### Description of first aid measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Flush eyes with water as a precaution.

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling and/or in section 11.

**Indication of any immediate medical attention and special treatment needed:** No data available

### Section 5. Firefighting Measures

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special hazards arising from the substance or mixture:** Carbon oxides, nitrogen oxides ( $\text{NO}_x$ )

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.



**Further information:** No data available

Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to other sections:** For disposal see section 13.

Section 7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place

Section 8. Exposure Controls / Personal Protection

**Control parameters**

**Components with workplace control parameters:** Contains no substances with occupational exposure limit values.

**Exposure controls**

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**Personal protective equipment**

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace



**Respiratory protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

#### Section 9. Physical and Chemical Properties

**Appearance:** White crystalline

**Odor:** Odorless

**Odor Threshold:** No data available

**pH:** 6.7 - 8.3

**Melting point/freezing point:** 150 - 153°C (302 - 307°F) - lit.

**Initial boiling point and boiling range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** 16 hPa (12 mmHg) at 20°C (68°F)

**Vapor density:** no data available

**Relative density:** 1.020 g/cm<sup>3</sup> at 20°C (68°F)

**Water solubility:** Soluble

**Partition coefficient (n-Octanol/Water):** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

**Other safety information:** No data available

#### Section 10. Stability and Reactivity

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** No data available

**Incompatible materials:** Strong oxidizing agents, Strong acids, Copper, Zinc, Nickel, Lead, Brass



**Hazardous decomposition products**

**Other decomposition products:** No data available

**In the event of fire:** see section 5

Section 11. Toxicological Information

**Information on toxicological effects**

**Acute toxicity**

**LD50 Oral:** rat - female - 311 mg/kg

**Inhalation:** No data available

**Dermal:** No data available

**Skin corrosion/irritation:** No data available

**Serious eye damage/eye irritation:** No data available

**Respiratory or skin sensitization:** No data available

**Germ cell mutagenicity:** No data available

**Result:** Negative

Histidine reversion (Ames)

**Carcinogenicity**

**IARC:** No components of this product, present at levels greater than or equal to 0.1%, is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No components of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information**

**RTECS:** FF2625000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12. Ecological Information

**Toxicity**

**Toxicity to fish**

**LC50:** Lepomis macrochirus (Bluegill) - 190.0 mg/l - 96.0 h

**Toxicity to daphnia and other aquatic invertebrates**

**LC50:** Daphnia magna (Water flea) - 96 mg/l - 48 h

**Toxicity to algae**

**EC50:** Desmodesmus subspicatus (green algae) - 9.5 mg/l - 72 h

**Persistence and degradability**

**Biodegradability**

**Result:** Not readily biodegradable.

**Bioaccumulative potential:** no data available

**Mobility in soil:** No data available

**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

**DOT (US):** Not dangerous goods

**IMDG**

**UN number:** 3077

**Class:** 9

**Packing group:** III

**EMS-No:** F-A, S-F

**Proper shipping name:** Environmentally Hazardous Substance, Solid, n.o.s. (Carbonohydrazide)

**Marine pollutant:** Marine pollutant

**IATA**

**UN number:** 3077

**Class:** 9

**Packing group:** III

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s. (Carbonohydrazide)

**Further information:** EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single



packaging and combination packaging containing inner packaging with Dangerous Goods > 5L for liquids or > 5kg for solids

Section 15. Regulatory Information

**SARA 302 Components**

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** Acute Health Hazard

**Massachusetts Right to Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right to Know Components**

Carbohydrazide (CAS-No. 497-18-7)

**New Jersey Right to Know Components**

Carbohydrazide (CAS-No. 497-18-7)

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

**HMIS Rating**

**Health:** 2

**Flammability:** 0

**Reactivity:** 0

**NFPA Rating**

**Health:** 2

**Flammability:** 0

**Reactivity:** 0

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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