



Hummel Croton Inc.  
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South Plainfield, NJ 07080

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MSDS



## Dihydrazine Sulfate MSDS

**In case of Emergency Call Chemtrec®**  
(U.S.) (800)-424-9300  
(International) (703)-527-3887

### Section I. Chemical Product and Company Identification

**Supplier:**

Hummel Croton Inc.  
10 Harmich Road  
South Plainfield, NJ 07080  
(908)-754-1800

**Chemical Name:** Dihydrazine Sulfate

**Synonym:** Hydrazine hemisulfate

**CAS Number:** 13464-80-7

**Chemical Formula:**  $(\text{H}_4\text{N}_2)_2 \cdot \text{H}_2\text{SO}_4$

HMIS Rating

Health	2
Flammability	0
Reactivity	1

Personal Protection E

### Section II. Composition and Information on Ingredients

Material	CAS#	%	OSHA	ACGIH
Dihydrazine Sulfate	13464-80-7	100%	0.1 mg/m <sup>3</sup> Skin*	0.013 mg/m <sup>3</sup> Skin*

\* These values are for Hydrazine

### Section III Hazards Identification:

**Acute Health Effects:** Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

**Chronic Health Effects:** Repeated or prolonged exposure can cause: damage to the liver, damage to the kidneys & damage to the lungs

**Accute Health Effects:** Hydrazine is listed by NTP (sufficient evidence of carcinogenicity from studies in experimental animals), IARC (Possibly Carcinogenic to Humans: Limited evidence in humans in the absence of sufficient evidence in experimental animals.) and regulated as a carcinogen by NIOSH (carcinogen defined with no further categorization).

### Section IV. First Aid Measures

**First Aid For Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**First Aid For Skin:** In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

**First Aid For Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**First Aid For Ingestion:** If swallowed, call a physician immediately.

## Section V. Fire and Explosion Data

**Flammability:** Non-Flamable

**Flash Points:** Not Applicable

**Auto-Ignition:** Not Applicable

**Flammable Limits:** Not Applicable

**Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.

**Fire Fighting Procedure:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Fire/Explosion Hazards:** Emits toxic fumes under fire conditions. Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air

## Section VI. Accidental Release Measures

**Spill Or Leak Procedures:** Utilize recommended protective clothing and equipment. Clean spills in a manner that does not disperse dust into the air. Spill area can be washed with water. Collect wash water for approved disposal. Keep from entering water or ground water

## Section VII. Handling and Storage

**Storage Temperatures:** Store at ambient temperature

**Shelf Life:** Unlimited in tightly closed container.

**Special Sensitivity:** None

**Handling/Storage Precautions:** Avoid breathing dust. Avoid getting in eyes or on skin. Wash thoroughly after handling. Store in a dry place away from direct sunlight, heat and incompatible materials (see Section X). Reseal containers immediately after use. Store away from food and beverages.

## Section VIII. Exposure Controls/Personal Protection

**Eye Protection:** Safety glasses or goggles.

**Skin Protection:** PVC gloves with impervious boots, apron or coveralls. Employees should wash their hands and face before eating, drinking or using tobacco products.

**Respirator:** Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator must be worn.

**Ventilation:** Use local ventilation if dusting is a problem, to maintain air levels below the recommended exposure limit.

**Additional Protective Measures:** Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of hazardous chemicals.

## Section IX. Physical and Chemical Properties

**Physical Form:** Crystals

**Color:** White

**Odor:** Odorless

**Molecular Weight:** 162.18

**Boiling Point:** Decomposes 180°C

**Melting/Freezing Point:** 45-55°C

**Solubility In Water:** 202g/100ml at ambient temperatures

**Specific Gravity:** Not Established

## Section X. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will Not occur

**Incompatibilities:** Oxidizing agents & bases

**Instable Conditions:** Excessive temperatures (see Incompatibilities).

**Decomposition Temperature:** Decomposes 180°C

**Decomposition products:** Oxides of Nitrogen and Sulfur

## Section XI. Toxicological Information

**RTECS Number:** N/A (see hydrazine hydrate MV8050000)

**Routes of Exposure:** Eye contact. Ingestion. Inhalation. Skin contact.

**Toxicity Data:** Orl-Rat LD50: 129 mg/kg for hydrazine hydrate

**Chronic Toxic Effects:** Repeated or prolong exposure can cause: damage to the liver, damage to the kidneys & damage to the

lungs

**Acute Toxic Effects:** Harmful if swallowed, inhaled, or absorbed through skin material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, and shortness of breath, headache, nausea and vomiting. May cause allergic reaction harmful if swallowed, inhaled, or absorbed through skin. May cause allergic reaction. Can cause CNS depression. May cause convulsions.

## Section XII. Ecological Information

**Ecotoxicity:** Not available at this time.

## Section XIII. Disposal Considerations

**Waste Disposal Method:** Waste disposal should be in accordance with existing federal, state and local environmental regulations.

## Section XIV. Transportation Information

**Proper Shipping Name:** Toxic solid, inorganic N.O.S. (dihydrazine sulfate)

**UN Number:** 3288

**Class:** 6.1

**P.G.:** III

**Label Code:** 6.1

**Reportable Quantity:** RQ 1(0.454)

## Section XV. Regulatory Information

**OSHA Status:** This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

**TSCA Chemical Inventory:** This compound is on the EPA Toxic Substance Control Act (TSCA) inventory List

**California Proposition 65:**

**SARA 313 Title III:** This product is or contains chemical(s) known to the state of California to cause cancer.

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: None

Section 313 Toxic Chemicals: None

## Section XVI. Other Information

**Prepared By:** Mark Dugan

**Date:** January 05, 2009

**Reason For Issue:** Updated Format

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