



Hummel Croton Inc.
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In Case Of Emergency Call Chemtrec®
(U.S.) (800) 424-9300
(International) (703) 527-3887

Dihydrazine Sulfate 16% Solution Safety Data Sheet

1. Product and Company

Product name: Dihydrazine Sulfate Solution

Synonym: Hydrazine Hemisulfate

CAS-No.: 13464-80-7

Company: Hummel Croton Inc.
10 Harmich Rd.
South Plainfield, NJ 07080

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Fax: 908-754-1815

Emergency telephone number

Emergency Phone #: Chemtrec US: 800-424-9300
Chemtrec International: 703-527-3887

HMIS Rating	
Health	2
Flammability	0
Reactivity	1
Personal Protection	E

2. Hazards

GHS Label elements

GHS Classification: Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Skin sensitisation (Category 1), H317
Carcinogenicity (Category 1B), H350
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

Pictogram(s)



Signal word **DANGER**

Hazard statement(s)

H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P322 Specific measures (see supplemental first aid instructions on this label).
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P361 Remove/ Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

None.

3. Composition/Ingredients

Substance
Formula: $(\text{H}_4\text{N}_2)_2 \cdot \text{H}_2\text{SO}_4$
Molecular weight: 162.18 g/mol

CAS-No.: 13464-80-7

Material	CAS	%	OSHA	ACGIH
Dihydrazine Sulfate	10034-93-2	15-17%	0.1 mg/m ³ Skin as Hydrazine	0.013 mg/m ³ Skin as Hydrazine
Water	7732-18-5	83-85%	Not Established	Not Established

4. First Aid

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.

5. Fire Data

Flammability: Non-Flammable

Flash Point: Not Applicable

Auto Ignition: Not Applicable

Flammable Limits: Not Applicable

Extinguishing Media: Water, carbon dioxide, foam.

Fire Fighting Procedure: In case of fire, wear NIOSH approved self-contained breathing apparatus (SCBA) with full-face piece, operated in the positive pressure mode. Wear full protective clothing.

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

6. Accidental Release

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.

7. Handling And Storage

Storage Temperatures: Store at ambient temperature

Shelf Life: Unlimited in tightly sealed container

Special Sensitivity: None.

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

8. Exposure Controls/Personal Protection

Eye Protection: Safety glasses or goggles.

Skin Protection: PVC gloves with impervious boots, apron or coveralls. Wash hands and face before eating, drinking or using tobacco.

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

9. Physical And Chemical Properties

Physical Form: Liquid

Color: Colorless to Yellow

Odor: Slight Odor

Molecular Weight: 162.18 g/mol

Boiling Point: Water boils approx. 100°C, remaining product decomposes 180°C

Melting/Freezing Point: 45-55°C

Solubility In Water: Completely miscible

Specific Gravity: Not Established

10. Stability And Reactivity

Stability: Stable.

Hazardous Polymerization: Will not occur.

Incompatibilities: Oxidizing agents and bases.

Instable Conditions: Excessive temperatures (see incompatibilities).

Decomposition Temperature: Above 180°C

Decomposition Products: Oxides of nitrogen and sulfur.

11. 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.

12. Ecological Information

Ecotoxicity: Not available at this time.

13. Disposal Considerations

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

14. Transportation Information

Proper Shipping Name: Toxic Liquid, Inorganic, N.O.S.(16% Dihydrazine Sulfate Aqueous Solution)
UN Number: 3287
Class: 6.1
P.G.: III
Label Code: 6.1
Reportable Quantity: RQ 1(.454)

15. 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: To the best of our knowledge, this product contains no levels of listed substances, which the State of California has found to cause cancer, birth defects or other reproductive effects.

SARA 313 Title III:

Section 320 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: None

Section 313 Toxic Chemicals: None

16. Other Information

Prepared By: Michael Richard

Date: June 1, 2015

Reason For Issue: GHS Compliance

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