



Hummel Croton Inc.  
10 Harmich Rd.  
South Plainfield, NJ 07080  
www.HummelCroton.com  
Phone: 908-754-1800  
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In Case Of Emergency Call Chemtrec®  
(U.S.) (800) 424-9300  
(International) (703) 527-3887

## Tetranitromethane Safety Data Sheet

### 1. Product and Company

Product name: Tetranitromethane  
Synonym: TNM  
CAS-No.: 509-14-8  
Company: Hummel Croton Inc.  
10 Harmich Rd.  
South Plainfield, NJ 07080  
Telephone: 908-754-1800  
Fax: 908-754-1815

| HMIS Rating         |   |
|---------------------|---|
| Health              | 3 |
| Flammability        | 1 |
| Reactivity          | 2 |
| Personal Protection | E |

Emergency telephone number

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

### 2. Hazards

#### GHS Label elements

GHS Classification: Oxidizing liquids (Category 1), H271  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 1), H330  
Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Carcinogenicity (Category 2), H351  
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Pictogram(s)



Signal word **DANGER**

Hazard statement(s)

- H271 May cause fire or explosion; strong oxidizer.
- H301 Toxic if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.

Precautionary statement(s)

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat.
- P220 Keep/Store away from clothing/ combustible materials.
- P221 Take any precaution to avoid mixing with combustibles.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
- 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.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P284 Wear respiratory protection.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- 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.
- P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
- P310 Immediately call a POISON CENTER or doctor/ physician.
- P330 Rinse mouth.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.
- P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
- 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:  $C(NO_2)_4$   
CAS-No.: 509-14-8

| Material          | CAS      | %    | OSHA                | ACGIH                   |
|-------------------|----------|------|---------------------|-------------------------|
| Tetranitromethane | 509-14-8 | 100% | 8 mg/m <sup>3</sup> | 0.005 mg/m <sup>3</sup> |

### 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 Points: Greater than 110°C

Auto-Ignition: 250-278°C

Flammable Limits: Not Applicable

Extinguishing Media: Water, Carbon Dioxide, or Appropriate Foam

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

Fire/Explosion Hazards: May explode when heated. Strong oxidizer. Emits toxic fumes under fire conditions.

### 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 vapor. 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: Pale Yellow

Odor: Pungent Odor

Molecular Weight: 196.04 g/mol

Boiling Point: 125.7°C

Melting/Freezing Point: 13.7°C

Solubility In Water: Insoluble

Specific Gravity: 1.62

## 10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will Not occur

Incompatibilities: Strong oxidizing agents, organic materials, strong reducing agents, strong bases, finely powdered metals, iron and iron salts, copper, brass, zinc and alcohols.

Instable Conditions: Excessive temperatures (see Incompatibilities).

Decomposition Temperature: Auto-Ignition 250-278°C

Decomposition products: Toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides.

## 11. Toxicological Information

RTECS Number: PB4025000

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

Toxicity Data: Orl-Rat LD50: 130 mg/kg lhl-Rat LC50: 18 ppm/4h lvn-Rat LD50: 12600 ug/kg

Chronic Toxic Effects: Carcinogen. Damage to the heart Damage to the eyes

Acute Toxic 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. May be fatal if inhaled, swallowed, or absorbed through skin. Causes eye irritation. Causes skin irritation. Absorption into the body leads to the formation of methemoglobin, which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer. Can cause CNS depression.

## 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: Tetranitromethane

UN Number: 1510

Class: 5.1

P.G.: I

Label Code: 5.1(6.1)

Reportable Quantity: RQ 10(4.54)

### **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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