

## 1,1,2,2-Tetrabromoethane-d<sub>2</sub>

### Section 1. Chemical product and company identifications

**Product code:** D-8243

**Chemical formula:** C<sub>2</sub>D<sub>2</sub>Br<sub>4</sub>

**CAS:** 33685-55-1

**CAS (unlabelled):** 79-27-6

**Synonyms:** Acetylene tetrabromide

**Supplier / Manufacturer:**

**C/D/N Isotopes Inc.**

88 Leacock Street

Pointe-Claire (Québec) H9R 1H1

Phone: 514-697-6254

Toll-Free (Canada & USA): 1-800-565-4696

Fax: 514-697-6148

Website: www.cdnisotopes.com

**In case of emergency:**

**TOXYSKAN HOTLINE: 1-855-780-0599**

### Section 2. Hazards identifications

**GHS (Globally Harmonized System of Classification and Labelling of Chemicals):**

- GHS Classification:**
- Acute toxicity, Oral (Category 4)
  - Acute toxicity, Inhalation (Category 2)
  - Skin irritation (Category 2)
  - Eye irritation (Category 2A)

- GHS Label elements:**
- Pictograms:  
  - Signal word: Danger

- Hazards statement:**
- H302 Harmful if swallowed.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H330 Fatal if inhaled

- Precautionary statement:**
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
  - P264 Wash hands 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 + P312 + P330 IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell. Rinse mouth.
  - 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.
  - P310 Immediately call a POISON CENTER or doctor/physician.
  - 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.
  - P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
  - P405 Store locked up.
  - P501 Dispose of contents/ container to an approved waste disposal plant

### **Section 3. Composition and information on ingredients**

<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>Concentration %</u></b>
1,1,2,2-Tetrabromoethane-d <sub>2</sub>	33685-55-1	> 98

### **Section 4. First aid measures**

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

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

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

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

**Indication of immediate medical attention and special treatment needed, if necessary:** Do not give anything by mouth to an unconscious victim.

**Most important symptoms and effects, both acute and delayed:** Nausea, Dizziness, Headache, Tiredness, Vomiting.

### **Section 5. Firefighting measures**

**Flammability of the product:** Not flammable or combustible.

**Products of combustion:** Hazardous decomposition products formed under fire conditions: Carbon oxides, hydrogen bromide gas.

**Firefighting media and instructions:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

### **Section 6. Accidental release measures**

**Personal precautions:** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

**Environmental precautions:** Do not let product enter drains.

**Methods for cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### **Section 7. Handling and storage**

**Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Provide appropriate exhaust ventilation.

**Storage:** Store at room temperature. Adequate ventilation.

### **Section 8. Exposure Controls, Personal Protections**

**Engineering controls:** Use mechanical exhaust or laboratory fumehood to avoid exposure.

**Eyes:** Safety glasses with side-shields conforming to NIOSH (US) or EN 166(EU).

**Respiratory:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US).

**Hands:** Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Skin/body:** Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Section 9. Physical and chemical properties (unlabelled)**

**Molecular weight:** 345.65 g/mol

**Physical status:** Liquid

**Color:** Colorless to light yellow

**Odour:** No data available

**Density:** 2.967 g/cm<sup>3</sup>

**Melting point:** -1 - 1 °C (30 - 34 °F)

**Boiling point:** 243 °C (469 °F)

**Vapour pressure:** 0.1 hPa (0.07 mmHg) at 20 °C (68 °F)

**Vapour density:** 11.9 (Air = 1)

**Partition coefficient (octanol/water):** log Pow: 1.98

**Water solubility:** No data available

**Lower explosion limit:** No data available.

**Upper explosion limit:** No data available.

**Auto-ignition temperature:** 335°C (635°F)

**Flash point:** No data available.

## **Section 10. Stability and reactivity**

**Stability and reactivity:** Stable under recommended storage conditions.

**Incompatibility:** Strong oxidizing agents, strong bases, metals.

**Products of combustion:** Hazardous decomposition products formed under fire conditions: Carbon oxides, hydrogen bromide gas.

**Reactivity conditions:** No data available.

## **Section 11. Toxicological information (unlabelled)**

**Toxicological data:** 1,1,2,2-Tetrabromoethane

### **Information on ingredients:**

<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>LD<sub>50</sub></u></b>	<b><u>LC<sub>50</sub></u></b>
1,1,2,2-Tetrabromoethane	79-27-6	Oral - Rat - 1,200 mg/kg Dermal - Rat - 5,250 mg/kg	LC50 Inhalation - Rat - 4 h - 549 mg/m <sup>3</sup>

### **Potential acute effects**

- **Eyes:** Causes serious eye irritation.
- **Skin:** Harmful if absorbed through skin. Causes skin irritation.
- **Inhalation:** Fatal if inhaled.
- **Ingestion:** Toxic if swallowed.

### **Potential chronic effects**

- **Carcinogenic effects:** IARC: No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **Mutagenic effects:** Laboratory experiments have shown mutagenic effects.
- **Teratogenic effects:** No data available.
- **Medical conditions aggravated by overexposure:** No data available.

## **Section 12. Ecological information**

### **Ecological data:**

<b><u>Name</u></b>	<b><u>Results</u></b>	<b><u>Species</u></b>	<b><u>Period</u></b>
1,1,2,2-Tetrabromoethane	19 mg/l LC50	Oryzias latipes	48h

**Effects on environment:** No data available.

**Mobility:** No data available.

**Environmental precautions:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

## **Section 13. Disposal considerations**

**Waste disposal:** Contact a licensed professional waste disposal service to dispose of this material.

## **Section 14. Transportation information**

### **Classification DOT/IMDG/IATA label:**

**Shipping name:** Tetrabromoethane

**UN number:** 2504

**Class:** 6.1

**Packaging group:** III

**Additional information:** None

## **Section 15. Regulatory information**

### **UNITED STATES: NFPA classification**



Health: 2  
Flammable: 0  
Reactivity: 0  
Special conditions: None

**Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous**

### **U.S. Federal regulations:**

**California proposition 65 requirements** : Not listed  
**SARA section 313 (specific toxic chemical listings)** : Not listed  
**CERCLA reportable quantity** : Not listed  
**Sections 302-304 reportable quantity** : Not listed  
**Community Right-to-Know (Sections 311 and 312)** : Listed

## **Section 16. Additional information**

**Date of issue:** March 29th, 2022

**Version:** 1

**Elaborated by:** Toxyscan Inc., 1-866-780-0599

**Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, C/D/N Isotopes Inc., Toxyscan Inc., or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*This safety data sheet has been prepared in accordance with the OSHA (USA), WHMIS (Canada) / GHS classification rules in effect at the time of writing.*