

# Safety Data Sheet

## 3-Chloropropionic-2,2,3,3-d<sub>4</sub> Acid

## Section 1. Chemical product and company identifications

Product code: D-5602

Chemical formula: C<sub>3</sub>HD<sub>4</sub>ClO<sub>2</sub>

CAS: 1219802-17-1

**CAS (unlabelled):** 107-94-8 **Synonyms:** β-Chloropropionic Acid

**Supplier / Manufacturer:** 

In case of emergency: **TOXYSCAN HOTLINE: 1-855-780-0599** 

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

Section 2. Hazards identifications

Physical state: Solid

Warning: Causes severe skin burns and eye damage. Routes of entry: Inhalation, ingestion, skin and eyes

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

**GHS Classification:** - Skin corrosion (Category 1A)

- Serious eye damage (Category 1)

**GHS Label elements:** - Pictograms: •

- Signal word: Danger

**Hazards statement:** - H314 Causes severe skin burns and eye damage.

**Precautionary statement:** - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

- P302 + P350 IF ON SKIN: Wash with plenty of soap and water.

- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. - P316 Get emergency medical help immediately.

Section 3. Composition and information on ingredients

**Concentration % Name** CAS

3-Chloropropionic-2,2,3,3-d<sub>4</sub> Acid 1219802-17-1 > 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.

## Section 5. Firefighting measures

Flammability of the product: Flammable in the presence of a source of ignition when the temperature is above the flash point.

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

Auto-ignition temperature: No data available.

Flash point: 125 °C (257 °F)

**Products of combustion:** Hazardous decomposition products formed under fire conditions: Carbon oxides, hydrogen chloride 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 dust formation. Ensure adequate ventilation. Avoid breathing dust

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

Methods for cleaning up: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## Section 7. Handling and storage

Handling: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.

Storage: Store at room temperature. Adequate ventilation. Protect from heat. Protect from moisture.

## **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: 108.52 g/mol

Physical status: Solid
Color: White to off-white
Odour: No data available
Density: No data available

Melting point: 37 - 41 °C (99 - 106 °F) Boiling point: 203 - 205 °C (397 - 401 °F) Vapour pressure: No data available Vapour density: No data available

Partition coefficient (octanol/water): log Pow: 0.41

Water solubility: Soluble

## Section 10. Stability and reactivity

Stability and reactivity: Stable under recommended storage conditions.

**Incompatibility:** Strong oxidizing agents.

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

Reactivity conditions: No data available.

## Section 11. Toxicological information (unlabelled)

Toxicological data: 3-Chloropropionic Acid

**Information on ingredients:** 

Name CAS LD<sub>50</sub> LC<sub>50</sub>

3-Chloropropionic Acid 107-94-8 No data available No data available

#### **Potential acute effects**

- Eyes: Causes severe eye damage.
- Skin: May be harmful if absorbed through skin. Causes severe skin burns.
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Ingestion: May be harmful if swallowed.

#### **Potential chronic effects**

- Carcinogenic effects: Carcinogenicity Mouse Intraperitoneal. Tumorigenic: Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. 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: No data available.
- Teratogenic effects: No data available.
- Medical conditions aggravated by overexposure: No data available.

## **Section 12. Ecological information**

#### **Ecological data:**

Name Results Species Period

3-Chloropropionic Acid No data available

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: Corrosive solid, acidic, organic, n.o.s. (3-Chloropropionic Acid)

UN number: UN3261

Class: 8

Packaging group: II

**Additional information: None** 

## Section 15. Regulatory information

**UNITED STATES: NFPA classification** 



Health: 3 Flammable: 1 Reactivity: 0 Special conditions: None

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

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

TSCA 8(b) inventory: 3-Chloropropionic Acid

SARA 302/304/311/312 extremely hazardous substances: Not Listed SARA 302/304 emergency planning and notification: Not Listed SARA 302/304/311/312 hazardous chemicals: Not Listed

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Fire hazard, Immediate (acute)

health hazard, Delayed (chronic) health hazard: Not Listed

CWA (Clean Water Act) 307: Not Listed CWA (Clean Water Act) 311: Not Listed

CAA (Clean Air Act) 112 accidental release prevention: Not Listed CAA (Clean Air Act) 112 regulated flammable substances: Not Listed CAA (Clean Air Act) 112 regulated toxic substances: Not Listed

#### State regulations:

**DEA List I Chemicals (Precursor Chemicals):** Not Listed **DEA List II Chemicals (Essential Chemicals):** Not Listed

**Substances in Massachusetts:** Not Listed **Dangerous substances in New Jersey:** Not Listed

New York – Dangerous substances with acute effects: Not Listed Dangerous substances in Pennsylvania – right to know: Not Listed

#### WHMIS (Canada):



E - Corrosive material

## **Section 16. Additional information**

#### **References:**

- ANSI Z400.1, MSDS Standard, 2001.
- Manufacturer's Material Safety Data Sheet.
- 29CFR Part1910.1200 OSHA MSDS Requirements.
- 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. -Canada
- Gazette Part II, Vol. 122, No. 2 Registration SOR/88-64 31 December, 1987 Hazardous Products Act "Ingredient Disclosure List".
- Federal act on the controlled products
- Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2002.
- Toxicological repertory, HSC.
- Material safety data sheet from the components.

Date of issue: January 21st, 2021

Version: 3

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.