

Safety Data Sheet

2-Methyl-d₃-citric Acid (mixture of diastereomers)

Section 1. Chemical product and company identifications

Product code: D-4162 Chemical formula: C₇H₇D₃O₇

CAS: 146764-58-1

CAS (unlabelled): 6061-96-7

Synonyms: 2-Hydroxy-1,2,3-butanetricarboxylic 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

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

GHS Classification: - Skin irritation (Category 2)

- Eye irritation (Category 2A)

- Specific target organ toxicity - single exposure (Category 3), Respiratory system

GHS Label elements: - Pictograms:

- Signal word: Warning

Hazards statement: - H315 Causes skin irritation.

- H319 Causes serious eye irritation.

- H335 May cause respiratory irritation.

Precautionary statement: - P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

- P264 Wash hands thoroughly after handling. - P271 Use only outdoors or in a well-ventilated area.

- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

- 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.

- P332 + P313 IF SKIN irritation occurs: Get medical advice/attention. - P337+P313 IF eye irritation persists: Get medical advice/attention.

- P362 + P364 Take off contaminated clothing and wash it 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

Concentration % Name CAS

146764-58-1 > 90 2-Methyl-d₃-citric Acid

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: No data available

Most important symptoms and effects, both acute and delayed: No data available

Section 5. Firefighting measures

Flammability of the product: No data available.

Products of combustion: Hazardous decomposition products formed under fire conditions: Carbon oxides. **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

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 FROZEN. Adequate ventilation. Protect from heat.

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: 206.15 g/mol

Physical status: Solid
Color: White to off-white
Odour: No data available
Density: No data available
Melting point: No data available
Boiling point: No data available
Vapour pressure: No data available
Vapour density: No data available

Partition coefficient (octanol/water): No data available

Water solubility: No data available
Lower explosion limit: No data available.
Upper explosion limit: No data available.
Auto-ignition temperature: No data available.

Flash point: No data available.

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.

Reactivity conditions: Heat.

Section 11. Toxicological information (unlabelled)

Toxicological data: 2-Methylcitric Acid

Information on ingredients:

Name CAS LD₅₀ LC₅₀

2-Methylcitric Acid 6061-96-7 No data available No data available

Potential acute effects

- Eyes: Causes serious eye irritation.
- Skin: Causes skin irritation.
- Inhalation: May cause respiratory tract irritation.
- Ingestion: No data available.

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: 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

2-Methylcitric 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: Not dangerous goods

UN number: None **Class:** None

Packaging group: None

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): Not Listed

Section 16. Additional information

Date of issue: March 14th, 2023

Version: 4

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.