



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 30-May-2024

Revision Number 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Code(s)** TRC-T310988-100MG  
**Product Name** 2,3,3,3-Tetrafluoropropanoic Acid  
**Form** Not applicable

*NOTE [8] - No registration number is given for this substance because it is under the threshold in REACH Article 6(1) and not subject to the registration requirements according to REACH Title II*

**EC No (EU Index No)** 671-742-6  
**CAS No.** 359-49-9  
**Pure substance/mixture** Substance  
**Formula** C<sub>3</sub>H<sub>2</sub>F<sub>4</sub>O<sub>2</sub>  
**Molecular weight** 146.04

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** Laboratory use  
**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

LGC Limited  
Queens Road  
Teddington  
Middlesex TW11 0LY  
UNITED KINGDOM  
:+44 (0) 20 8943 7000  
Fax :+44 (0) 20 8943 2767  
eMail : gb@lgcstandards.com

Web : [www.lgcstandards.com](http://www.lgcstandards.com)

For further information, please contact

**E-mail address** sds-request@lgcgroup.com



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## 1.4. Emergency telephone number

Emergency Telephone

For Hazardous Materials or Dangerous Goods Incident  
Spill, Leak, Fire Exposure, or Accident  
Call CHEMTREC:  
USA & Canada 1-800-424-9300  
Rest of the world +1 703-741-5970

| Emergency Telephone - §45 - (EC)1272/2008 |                          |
|---|--------------------------|
| Europe                                    | 112                      |
| Austria                                   | No information available |
| Bulgaria                                  |                          |
| Croatia                                   |                          |
| Cyprus                                    |                          |
| Czech Republic                            |                          |
| Denmark                                   |                          |
| France                                    |                          |
| Hungary                                   |                          |
| Ireland                                   |                          |
| Italy                                     |                          |
| Lithuania                                 |                          |
| Luxembourg                                |                          |
| Netherlands                               |                          |
| Norway                                    |                          |
| Portugal                                  |                          |
| Romania                                   |                          |
| Slovakia                                  |                          |
| Slovenia                                  |                          |
| Spain                                     |                          |
| Sweden                                    |                          |
| Switzerland                               |                          |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to  
Regulation (EC) No. 1272/2008 [CLP]

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Acute toxicity - Oral             | Category 4 - (H302)                |
| Skin corrosion/irritation         | Category 1 Sub-category A - (H314) |
| Serious eye damage/eye irritation | Category 1 - (H318)                |
| Chronic aquatic toxicity          | Category 3 - (H412)                |



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### 2.2. Label elements

Contains 2,3,3,3-Tetrafluoropropanoic Acid



Signal word  
Danger

### Hazard statements

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H412 - Harmful to aquatic life with long lasting effects

### Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P280 - Wear protective gloves/protective clothing and eye/face protection  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]  
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  
P331 - Do NOT induce vomiting

### 2.3. Other hazards

No information available.

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

| Chemical name                     | EU - REACH (1907/2006) - Article 59(1)<br>- Candidate List of Substances of Very<br>High Concern (SVHC) for Authorisation | EU - REACH (1907/2006) - Endocrine<br>Disruptor Assessment List of<br>Substances |
|-----------------------------------|---|--|
| 2,3,3,3-Tetrafluoropropanoic Acid | -   | -  |

## SECTION 3: Composition/information on ingredients

### 3.1 Substances



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| Chemical name                                 | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP]         | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|----------|---------------------------|---------------------|---|------------------------------------|----------|----------------------|
| 2,3,3,3-Tetrafluoropropanoic Acid<br>359-49-9 | 100      | -                         | 671-742-6           | Acute Tox. 4 (H302)<br>Skin Corr. 1A (H314)<br>Aquatic Chronic 3 (H412) |                                    |          |                      |

**Full text of H- and EUH-phrases: see section 16**

Acute Toxicity Estimate  
No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|   |   |
|---|---|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention. |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.   |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.  |
| <b>Ingestion</b>                          | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.   |



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Wear personal protective clothing (see section 8).

## **4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation.

## **4.3. Indication of any immediate medical attention and special treatment needed**

**Note to doctors** Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

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## 6.2. Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

## 6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store locked up. Store away from other materials.

### 7.3. Specific end use(s)



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**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### 8.2. Exposure controls

#### Personal protective equipment

##### Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Tight sealing safety goggles. Face protection shield.

##### Hand protection

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear protective Viton™ gloves. Wear suitable gloves. Impervious gloves.

##### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

##### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

##### General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks



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and immediately after handling the product.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                 |                                |
|-----------------|--------------------------------|
| Physical state  | Solid                          |
| Appearance      | Solid with a low melting point |
| Colour          | white to off-white             |
| Odour           | No information available.      |
| Odour threshold | No information available       |

| Property                                | Values                   | Remarks • Method         |
|---|--------------------------|--------------------------|
| Melting point / freezing point          | No data available        | None known               |
| Initial boiling point and boiling range | No data available        | None known               |
| Flammability                            | No data available        | None known               |
| Flammability Limit in Air               |                          | None known               |
| Upper flammability or explosive limits  | No data available        |                          |
| Lower flammability or explosive limits  | No data available        |                          |
| Flash point                             | No data available        | None known               |
| Autoignition temperature                | No data available        | None known               |
| Decomposition temperature               |                          | None known               |
| pH                                      | No data available        | None known               |
| pH (as aqueous solution)                | No data available        | No information available |
| Kinematic viscosity                     | No data available        | None known               |
| Dynamic viscosity                       | No data available        | None known               |
| Water solubility                        | No data available        | None known               |
| Solubility(ies)                         | No data available        | None known               |
| Partition coefficient                   | No data available        | None known               |
| Vapour pressure                         | No data available        | None known               |
| Relative density                        | No data available        | None known               |
| Bulk density                            | No data available        |                          |
| Liquid Density                          | No data available        |                          |
| Relative vapour density                 | No data available        | None known               |
| Particle characteristics                |                          |                          |
| Particle Size                           | No information available |                          |
| Particle Size Distribution              | No information available |                          |

### 9.2. Other information

|                   |          |
|-------------------|----------|
| Molecular weight  | 146.04   |
| Molecular formula | C3H2F4O2 |





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9.2.1. Information with regards to physical hazard classes  
Not applicable

9.2.2. Other safety characteristics  
No information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity No information available.

#### 10.2. Chemical stability

Stability Stable under normal conditions.

#### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

#### 10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

#### 10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

Hazardous decomposition products None known based on information supplied.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Information on likely routes of exposure

##### Product Information

##### Inhalation

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with



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tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

### Eye contact

Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

### Skin contact

Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

### Ingestion

Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing.

#### Numerical measures of toxicity

No information available

#### Acute toxicity

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Skin corrosion/irritation

Classification based on data available for ingredients. Causes severe skin burns and eye damage.

#### Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes serious eye damage. Causes burns.

#### Respiratory or skin sensitisation

No information available.

#### Germ cell mutagenicity

No information available.



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**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 11.2.2. Other information

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

### 12.3. Bioaccumulative potential

**Bioaccumulation** No information available.

### 12.4. Mobility in soil



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Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

### 12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

### 12.7. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

## SECTION 14: Transport information

### IATA

|                                   |  |
|-----------------------------------|--|
| 14.1 UN number or ID number       | UN3261   |
| 14.2 UN proper shipping name      | Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid)               |
| 14.3 Transport hazard class(es)   | 8  |
| 14.4 Packing group                | I  |
| Description                       | UN3261, Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid), 8, I |
| 14.5 Environmental hazards        | No   |
| 14.6 Special precautions for user |  |
| Special Provisions                | A3, A803   |
| ERG Code                          | 8L   |

### IMDG

|                                 |  |
|---------------------------------|--|
| 14.1 UN number or ID number     | UN3261   |
| 14.2 UN proper shipping name    | Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid)               |
| 14.3 Transport hazard class(es) | 8  |
| 14.4 Packing group              | I  |
| Description                     | UN3261, Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid), 8, I |



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14.5 Marine pollutant NP  
Environmental hazards No  
14.6 Special precautions for user  
Special Provisions 274  
EmS-No. F-A, S-B No information available  
14.7 Maritime transport in bulk according to IMO instruments No information available

### RID

14.1 UN number or ID number UN3261  
14.2 UN proper shipping name Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid)  
14.3 Transport hazard class(es) 8  
14.4 Packing group I  
Description UN3261, Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid), 8, I  
14.5 Environmental hazards No  
14.6 Special precautions for user  
Special Provisions 274  
Classification code C4

### ADR

14.1 UN number or ID number UN3261  
14.2 UN proper shipping name Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid)  
14.3 Transport hazard class(es) 8  
14.4 Packing group I  
Description UN3261, Corrosive solid, acidic, organic, n.o.s. (2,3,3,3-Tetrafluoropropanoic Acid), 8, I, (E)  
14.5 Environmental hazards No  
14.6 Special precautions for user  
Special Provisions 274  
Classification code C4  
Tunnel restriction code (E)

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Poland

SDS created according to the following Polish regulation: Act of February 25, 2011 on



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chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

## European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

## Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

## DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors

Not applicable

## Persistent Organic Pollutants

Not applicable

## Ozone-depleting substances (ODS) regulation (EC) 1005/2009

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Not applicable

### International Inventories

#### **TSCA**

LGC has not confirmed that the chemical substances in this product are on the TSCA Inventory, and LGC is distributing this product solely for use either in applications statutorily exempt from TSCA and regulated under other laws (e.g., FFDCA, FIFRA) or in research and development activities in accordance with the TSCA Inventory R&D exemption provided at 40 CFR 720.36. It is the end-user's responsibility to understand and follow the requirements that apply to its use of this product.

#### **DSL/NDSL**

Contact supplier for inventory compliance status

#### **EINECS/ELINCS**

Contact supplier for inventory compliance status

#### **ENCS**

Contact supplier for inventory compliance status

#### **IECSC**

Contact supplier for inventory compliance status

#### **KECL**

Contact supplier for inventory compliance status

#### **PICCS**

Contact supplier for inventory compliance status

#### **AIIC**

Contact supplier for inventory compliance status

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

#### **Chemical Safety Report**

A Chemical Safety Assessment is not required for this substance

## **SECTION 16: Other information**

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H412 - Harmful to aquatic life with long lasting effects



# SAFETY DATA SHEET

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Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 30-May-2024

Revision Number 1

## TRC-T310988-100MG - 2,3,3,3-Tetrafluoropropanoic Acid

### Legend

SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: Exposure controls/personal protection

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | Sk*  | Skin designation                 |

| Classification procedure  |                    |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity   | Calculation method |
| Acute dermal toxicity   | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - Vapour                              | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitisation                                       | Calculation method |
| Skin sensitisation  | Calculation method |
| Mutagenicity  | Calculation method |
| Carcinogenicity   | Calculation method |
| Reproductive toxicity   | Calculation method |
| STOT - single exposure  | Calculation method |
| STOT - repeated exposure  | Calculation method |
| Acute aquatic toxicity  | Calculation method |
| Chronic aquatic toxicity  | Calculation method |
| Aspiration hazard   | Calculation method |
| Ozone   | Calculation method |

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AELG(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)





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New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

Revision date 30-May-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

### Disclaimer

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/ or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

**End of Safety Data Sheet**