

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

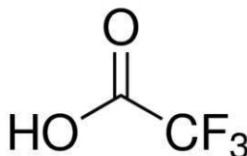
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Reference number: 0349A  
Issue date: 4/10/2024 Revision date: 4/10/2026 Supersedes version of: 4/16/2016 Version: 1.0



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

### 1.1. Product identifier

|                    |                                                 |
|--------------------|-------------------------------------------------|
| Product form       | : Substance                                     |
| Trade name         | : TRIFLUOROACETIC ACID EXTRA PURE               |
| EC Index-No.       | : 607-091-00-1                                  |
| EC-No.             | : 200-929-3                                     |
| CAS-No.            | : 76-05-1                                       |
| Product code       | : B-02765                                       |
| Type of product    | : Organic compound                              |
| Formula            | : C <sub>2</sub> HF <sub>3</sub> O <sub>2</sub> |
| Chemical structure | :                                               |



|          |                                                                                                            |
|----------|------------------------------------------------------------------------------------------------------------|
| Synonyms | : 2,2,2-Trifluoroacetic acid, 2,2,2-Trifluoroethanoic acid, Perfluoroacetic acid, / Trifluoroethanoic acid |
|----------|------------------------------------------------------------------------------------------------------------|

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

#### 1.2.1. Relevant identified uses

|                                  |                                                     |
|----------------------------------|-----------------------------------------------------|
| Industrial/Professional use spec | : Industrial<br>For professional use only           |
| Use of the substance/mixture     | : Laboratory chemicals<br>Manufacture of substances |

#### 1.2.2. Uses advised against

No additional information available

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

Bio-Chem Chemicals  
5455, Nicholson Road Science Market,  
Ambala Cantt. 133001 Haryana (India)  
+91-82952 41953  
[info@biofinechemical.com](mailto:info@biofinechemical.com) - [www.biofinechemical.com](http://www.biofinechemical.com)

### 1.4. Emergency telephone number

|                  |                                                      |
|------------------|------------------------------------------------------|
| Emergency number | : +91 99921 51495 (10.00am - 06.30pm) (Office Hours) |
|------------------|------------------------------------------------------|

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

|                                                                   |      |
|-------------------------------------------------------------------|------|
| Acute toxicity (inhal.), Category 4                               | H332 |
| Skin corrosion/irritation, Category 1                             | H314 |
| Hazardous to the aquatic environment – Chronic Hazard, Category 3 | H412 |

Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Harmful if inhaled. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

# TRIFLUOROACETIC ACID EXTRA PURE

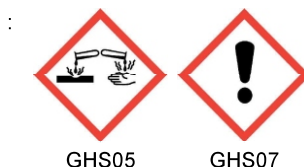
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H314 - Causes severe skin burns and eye damage.  
H332 - Harmful if inhaled.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)

: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P273 - Avoid release to the environment.  
P280 - Wear protective clothing, eye protection, face protection, protective gloves.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .  
P304+P340 - IF INHALED: Remove person to fresh air and keep 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.

Nordic countries regulation

Denmark

MAL code

: 00-3 (Executive Order No. 301 from 1993)

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0,1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Mono-constituent

| Name                 | Product identifier                                                  | %   |
|----------------------|---------------------------------------------------------------------|-----|
| TRIFLUOROACETIC ACID | CAS-No.: 76-05-1<br>EC-No.: 200-929-3<br>EC Index-No.: 607-091-00-1 | 100 |

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Call a physician immediately.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact

: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after ingestion

: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

---

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

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| Symptoms/effects                    | : Causes severe skin burns and eye damage. |
| Symptoms/effects after inhalation   | : Harmful if inhaled.                      |
| Symptoms/effects after skin contact | : Burns.                                   |
| Symptoms/effects after eye contact  | : Serious damage to eyes.                  |
| Symptoms/effects after ingestion    | : Burns.                                   |

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

|                                |                                                    |
|--------------------------------|----------------------------------------------------|
| Suitable extinguishing media   | : Carbon dioxide. Dry powder. Foam. Water spray.   |
| Unsuitable extinguishing media | : Do not use extinguishing media containing water. |

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

|                                                  |                                |
|--------------------------------------------------|--------------------------------|
| Fire hazard                                      | : No fire hazard.              |
| Explosion hazard                                 | : No direct explosion hazard.  |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

### 5.3. Advice for firefighters

|                                |                                                                                                                                                                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.                                                                                  |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

## SECTION 6: Accidental release measures

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

|                                           |                                                                                                                                                                                                            |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General measures                          | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.                                                                    |
| <b>6.1.1. For non-emergency personnel</b> |                                                                                                                                                                                                            |
| Protective equipment                      | : Wear recommended personal protective equipment.                                                                                                                                                          |
| Emergency procedures                      | : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.                                                              |
| <b>6.1.2. For emergency responders</b>    |                                                                                                                                                                                                            |
| Protective equipment                      | : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures                      | : Evacuate unnecessary personnel. Stop leak if safe to do so.                                                                                                                                              |

### 6.2. Environmental precautions

Avoid release to the environment.

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

|                         |                                                                                                                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For containment         | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. On land, sweep or shovel into suitable containers. Collect spillage.                                                                  |
| Other information       | : Dispose of materials or solid residues at an authorized site.                                                                                                                       |

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

|                                   |                                                                                                                                                                                                                                                                           |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.                                                                                                                                                                                |
| Precautions for safe handling     | : Do not breathe vapours. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. |
| Hygiene measures                  | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.        |

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

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Technical measures  | : Keep in a cool, well-ventilated place away from heat.                             |
| Storage conditions  | : Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Packaging materials | : Store always product in container of same material as original container.         |

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

##### Personal protective equipment symbol(s):



# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

---

### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or face shield

### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear a mask

#### Hand protection:

Protective gloves

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Wear appropriate mask

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

|                                                 |                                                                                |
|-------------------------------------------------|--------------------------------------------------------------------------------|
| Physical state                                  | : Liquid                                                                       |
| Colour                                          | : Colourless.                                                                  |
| Appearance                                      | : Clear liquid.                                                                |
| Molecular mass                                  | : 114.02 g/mol                                                                 |
| Odour                                           | : strong pungent odor.                                                         |
| Odour threshold                                 | : Not available                                                                |
| Melting point                                   | : Not applicable                                                               |
| Freezing point                                  | : -15.4 °C                                                                     |
| Boiling point                                   | : 72.4 °C                                                                      |
| Flammability                                    | : Non flammable.                                                               |
| Lower explosion limit                           | : Not available                                                                |
| Upper explosion limit                           | : Not available                                                                |
| Flash point                                     | : > 100 °C - Pensky-Martens closed cup - ISO 2719                              |
| Auto-ignition temperature                       | : Not available                                                                |
| Decomposition temperature                       | : Not available                                                                |
| pH                                              | : 1 at 20 °C                                                                   |
| pH solution concentration                       | : 1 %                                                                          |
| Viscosity, kinematic                            | : Not available                                                                |
| Solubility                                      | : Water: Miscible<br>Ethanol: Miscible<br>Ether: Miscible<br>Acetone: Miscible |
| Partition coefficient n-octanol/water (Log Kow) | : Not available                                                                |
| Partition coefficient n-octanol/water (Log Pow) | : 2.1                                                                          |
| Vapour pressure                                 | : 158 hPa at 25 °C                                                             |
| Vapour pressure at 50°C                         | : Not available                                                                |
| Density                                         | : 1.489 g/cm³ at 20 °C                                                         |
| Relative density                                | : Not available                                                                |
| Relative vapour density at 20°C                 | : 3.9 (Air = 1)                                                                |
| Particle characteristics                        | : Not applicable                                                               |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

---

### 9.2.2. Other safety characteristics

Refractive index : 1.2995 – 1.3005 (20 °C, 589 nm)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Air contact. Direct sunlight.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

## SECTION 11: Toxicological information

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

|                                   |                                                         |
|-----------------------------------|---------------------------------------------------------|
| Acute toxicity (oral)             | : Not classified                                        |
| Acute toxicity (dermal)           | : Not classified                                        |
| Acute toxicity (inhalation)       | : Harmful if inhaled.                                   |
| Skin corrosion/irritation         | : Causes severe skin burns.<br>pH: 1 at 20 °C           |
| Serious eye damage/irritation     | : Assumed to cause serious eye damage<br>pH: 1 at 20 °C |
| Respiratory or skin sensitisation | : Not classified                                        |
| Germ cell mutagenicity            | : Not classified                                        |
| Carcinogenicity                   | : Not classified                                        |
| Reproductive toxicity             | : Not classified                                        |
| STOT-single exposure              | : Not classified                                        |
| STOT-repeated exposure            | : Not classified                                        |
| Aspiration hazard                 | : Not classified                                        |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

|                                                           |                                                      |
|-----------------------------------------------------------|------------------------------------------------------|
| Ecology - general                                         | : Harmful to aquatic life with long lasting effects. |
| Ecology - water                                           | : Harmful to aquatic life with long lasting effects. |
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified                                     |
| Hazardous to the aquatic environment, long-term (chronic) | : Harmful to aquatic life with long lasting effects. |

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 12.2. Persistence and degradability

#### TRIFLUOROACETIC ACID EXTRA PURE (76-05-1)

|                               |                    |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                            |                                                                                                                                                                                                                        |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional waste regulation                  | : Disposal must be done according to official regulations.                                                                                                                                                             |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions.                                                                                                                          |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                                                                                                                                             |
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Disposal must be done according to official regulations. |
| Additional information                     | : Do not re-use empty containers.                                                                                                                                                                                      |

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

|               |           |
|---------------|-----------|
| UN-No. (ADR)  | : UN 2699 |
| UN-No. (IMDG) | : UN 2699 |
| UN-No. (IATA) | : UN 2699 |
| UN-No. (ADN)  | : UN 2699 |
| UN-No. (RID)  | : UN 2699 |

### 14.2. UN proper shipping name

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| Proper Shipping Name (ADR)            | : TRIFLUOROACETIC ACID                    |
| Proper Shipping Name (IMDG)           | : TRIFLUOROACETIC ACID                    |
| Proper Shipping Name (IATA)           | : Trifluoroacetic acid                    |
| Proper Shipping Name (ADN)            | : TRIFLUOROACETIC ACID                    |
| Proper Shipping Name (RID)            | : TRIFLUOROACETIC ACID                    |
| Transport document description (ADR)  | : UN 2699 TRIFLUOROACETIC ACID, 8, I, (E) |
| Transport document description (IMDG) | : UN 2699 TRIFLUOROACETIC ACID, 8, I      |
| Transport document description (IATA) | : UN 2699 Trifluoroacetic acid, 8, I      |
| Transport document description (ADN)  | : UN 2699 TRIFLUOROACETIC ACID, 8, I      |
| Transport document description (RID)  | : UN 2699 TRIFLUOROACETIC ACID, 8, I      |

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 14.3. Transport hazard class(es)

**ADR**

Transport hazard class(es) (ADR) : 8  
Danger labels (ADR) : 8  
:



**IMDG**

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8  
:



**IATA**

Transport hazard class(es) (IATA) : 8  
Danger labels (IATA) : 8  
:



**ADN**

Transport hazard class(es) (ADN) : 8  
Danger labels (ADN) : 8  
:



**RID**

Transport hazard class(es) (RID) : 8  
Danger labels (RID) : 8  
:



### 14.4. Packing group

Packing group (ADR) : I  
Packing group (IMDG) : I  
Packing group (IATA) : I  
Packing group (ADN) : I  
Packing group (RID) : I

### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

### 14.6. Special precautions for user

**Overland transport**

Classification code (ADR) : C3  
Limited quantities (ADR) : 0

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

|                                                           |             |
|-----------------------------------------------------------|-------------|
| Excepted quantities (ADR)                                 | : E0        |
| Packing instructions (ADR)                                | : P001      |
| Mixed packing provisions (ADR)                            | : MP8, MP17 |
| Portable tank and bulk container instructions (ADR)       | : T10       |
| Portable tank and bulk container special provisions (ADR) | : TP2       |
| Tank code (ADR)                                           | : L10BH     |
| Vehicle for tank carriage                                 | : AT        |
| Transport category (ADR)                                  | : 1         |
| Special provisions for carriage - Operation (ADR)         | : S20       |
| Hazard identification number (Kemler No.)                 | : 88        |
| Orange plates                                             | :           |



|                               |      |
|-------------------------------|------|
| Tunnel restriction code (ADR) | : E  |
| EAC code                      | : 2X |
| APP code                      | : B  |

### Transport by sea

|                                    |                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Limited quantities (IMDG)          | : 0                                                                                                                                                                                                                                                                                                                                                           |
| Excepted quantities (IMDG)         | : E0                                                                                                                                                                                                                                                                                                                                                          |
| Packing instructions (IMDG)        | : P001                                                                                                                                                                                                                                                                                                                                                        |
| Tank instructions (IMDG)           | : T10                                                                                                                                                                                                                                                                                                                                                         |
| Tank special provisions (IMDG)     | : TP2                                                                                                                                                                                                                                                                                                                                                         |
| EmS-No. (Fire)                     | : F-A                                                                                                                                                                                                                                                                                                                                                         |
| EmS-No. (Spillage)                 | : S-B                                                                                                                                                                                                                                                                                                                                                         |
| Stowage category (IMDG)            | : B                                                                                                                                                                                                                                                                                                                                                           |
| Stowage and handling (IMDG)        | : SW1, SW2, H2                                                                                                                                                                                                                                                                                                                                                |
| Segregation (IMDG)                 | : SGG1, SG36, SG49                                                                                                                                                                                                                                                                                                                                            |
| Properties and observations (IMDG) | : Colourless, fuming, hygroscopic liquid with a pungent odour. Miscible with water. When heated to decomposition or in contact with acids evolves toxic gases. In the presence of moisture, highly corrosive to most metals. Vapours are highly irritating to skin, eyes and mucous membranes. Liquid causes severe burns to skin, eyes and mucous membranes. |
| MFAG-No                            | : 154                                                                                                                                                                                                                                                                                                                                                         |

### Air transport

|                                              |             |
|----------------------------------------------|-------------|
| PCA Excepted quantities (IATA)               | : E0        |
| PCA Limited quantities (IATA)                | : Forbidden |
| PCA limited quantity max net quantity (IATA) | : Forbidden |
| PCA packing instructions (IATA)              | : 850       |
| PCA max net quantity (IATA)                  | : 0.5L      |
| CAO packing instructions (IATA)              | : 854       |
| CAO max net quantity (IATA)                  | : 2.5L      |
| ERG code (IATA)                              | : 8N        |

### Inland waterway transport

|                                   |          |
|-----------------------------------|----------|
| Classification code (ADN)         | : C3     |
| Limited quantities (ADN)          | : 0      |
| Excepted quantities (ADN)         | : E0     |
| Equipment required (ADN)          | : PP, EP |
| Number of blue cones/lights (ADN) | : 0      |

### Rail transport

|                                                           |             |
|-----------------------------------------------------------|-------------|
| Classification code (RID)                                 | : C3        |
| Limited quantities (RID)                                  | : 0         |
| Excepted quantities (RID)                                 | : E0        |
| Packing instructions (RID)                                | : P001      |
| Mixed packing provisions (RID)                            | : MP8, MP17 |
| Portable tank and bulk container instructions (RID)       | : T10       |
| Portable tank and bulk container special provisions (RID) | : TP2       |

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Tank codes for RID tanks (RID) : L10BH  
Special provisions for RID tanks (RID) : TU38, TE22  
Transport category (RID) : 1  
Hazard identification number (RID) : 88

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) |                                 |
|----------------------------------------|---------------------------------|
| Reference code                         | Applicable on                   |
| 3(b)                                   | TRIFLUOROACETIC ACID EXTRA PURE |
| 3(c)                                   | TRIFLUOROACETIC ACID EXTRA PURE |

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

##### Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 729).  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed  
SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Denmark

MAL code : 00-3 (Executive Order No. 301 from 1993)

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

| Abbreviations and acronyms: |                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| ADN                         | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                         | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                         | Acute Toxicity Estimate                                                                         |
| BCF                         | Bioconcentration factor                                                                         |
| BLV                         | Biological limit value                                                                          |
| BOD                         | Biochemical oxygen demand (BOD)                                                                 |
| COD                         | Chemical oxygen demand (COD)                                                                    |
| DMEL                        | Derived Minimal Effect level                                                                    |
| DNEL                        | Derived-No Effect Level                                                                         |
| EC-No.                      | European Community number                                                                       |
| EC50                        | Median effective concentration                                                                  |
| EN                          | European Standard                                                                               |
| IARC                        | International Agency for Research on Cancer                                                     |
| IATA                        | International Air Transport Association                                                         |
| IMDG                        | International Maritime Dangerous Goods                                                          |
| LC50                        | Median lethal concentration                                                                     |
| LD50                        | Median lethal dose                                                                              |
| LOAEL                       | Lowest Observed Adverse Effect Level                                                            |
| NOAEC                       | No-Observed Adverse Effect Concentration                                                        |
| NOAEL                       | No-Observed Adverse Effect Level                                                                |
| NOEC                        | No-Observed Effect Concentration                                                                |
| OECD                        | Organisation for Economic Co-operation and Development                                          |
| OEL                         | Occupational Exposure Limit                                                                     |
| PBT                         | Persistent Bioaccumulative Toxic                                                                |
| PNEC                        | Predicted No-Effect Concentration                                                               |
| RID                         | Regulations concerning the International Carriage of Dangerous Goods by Rail                    |
| SDS                         | Safety Data Sheet                                                                               |
| STP                         | Sewage treatment plant                                                                          |
| ThOD                        | Theoretical oxygen demand (ThOD)                                                                |
| TLM                         | Median Tolerance Limit                                                                          |
| VOC                         | Volatile Organic Compounds                                                                      |
| CAS-No.                     | Chemical Abstract Service number                                                                |

# TRIFLUOROACETIC ACID EXTRA PURE

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Abbreviations and acronyms:

|        |                                          |
|--------|------------------------------------------|
| N.O.S. | Not Otherwise Specified                  |
| vPvB   | Very Persistent and Very Bioaccumulative |
| ED     | Endocrine disrupting properties          |

### Full text of H- and EUH-statements:

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4                               |
| Aquatic Chronic 3         | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| H314                      | Causes severe skin burns and eye damage.                          |
| H332                      | Harmful if inhaled.                                               |
| H412                      | Harmful to aquatic life with long lasting effects.                |
| Skin Corr. 1              | Skin corrosion/irritation, Category 1                             |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.