



# Qualikems Lifesciences Pvt. Ltd.

(Formerly known as Qualikems fine chem Pvt Ltd)

Works : Plot No. 68-69,G.I.D.C Industrial Estate,Nandesari,Vadodara-391340 (Gujarat)

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

### Product identifiers

Product name : **Trifluoro acetic Acid**

CAS-No. : **76-05-1**

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

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

Company : Qualikems Lifesciences Pvt Ltd

Works : Plot No. 68.69,G.I.D.C  
Industrial Estate, Nandesari,  
Vadodara-391340 (Gujarat)

### Emergency telephone number

Emergency Phone # : +91-265-2841531 (9:00am - 6:30 pm) [Office hours]

## SECTION 2: Hazards identification

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 4), H332

Skin corrosion (Category 1A), H314

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

C Corrosive R35

Xn Harmful R20

R52/53

For the full text of the R-phrases mentioned in this Section, see Section 16.

### Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger Corrosive to metals Skin Irritation

Hazard statement(s)	
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statement(s)	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

#### Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Synonyms	:	TFA
Formula	:	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub> O <sub>2</sub>
Molecular weight	:	114,02 g/mol
CAS-No.	:	76-05-1
EC-No.	:	200-929-3
Index-No.	:	607-091-00-1

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
<b>Trifluoroacetic acid</b>			
CAS-No.	76-05-1	Acute Tox. 4; Skin Corr. 1A;	<= 100 %
EC-No.	200-929-3	Aquatic Chronic 3; H314,	
Index-No.	607-091-00-1	H332, H412	

#### Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
<b>Trifluoroacetic acid</b>			
CAS-No.	76-05-1	C, R20 - R35 - R52/53	<= 100 %
EC-No.	200-929-3		
Index-No.	607-091-00-1		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### SECTION 4: First aid measures

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

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

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

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

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

**SECTION 5: Firefighting measures****Extinguishing media Suitable****extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, Hydrogen fluoride

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

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

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

hygroscopic Store under inert gas.

Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Components with workplace control parameters

### Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

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) or CEN (EU).

##### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

- |   |  |
|---|--|
| a) Appearance                                   | Form: clear, liquid<br>Colour: colourless                                    |
| b) Odour  | pungent  |
| c) Odour Threshold                              | No data available  |
| d) pH   | 1,0 at 1 g/l at 20 °C  |
| e) Melting point/freezing point                 | Melting point/range: -15,4 °C - lit.   |
| f) Initial boiling point and boiling range      | 72,4 °C - lit.   |
| g) Flash point                                  | > 100 °C - closed cup - Tested according to Annex V of Directive 67/548/EEC. |
| h) Evaporation rate                             | No data available  |
| i) Flammability (solid, gas)                    | No data available  |
| j) Upper/lower flammability or explosive limits | No data available  |
| k) Vapour pressure                              | 130,0 hPa at 20,0 °C<br>142,7 hPa at 25,0 °C                                 |

l) Vapour density	No data available
m) Relative density	1,489 g/cm <sup>3</sup> at 20 °C
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	log Pow: -2,10
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

#### **Other safety information**

No data available

### **SECTION 10: Stability and reactivity**

#### **Reactivity**

No data available

#### **Chemical stability**

Stable under recommended storage conditions.

#### **Possibility of hazardous reactions**

No data available

#### **Conditions to avoid**

No data available

#### **Incompatible materials**

Strong bases, Metals, Oxidizing agents, Alcohols, Epoxides, Steel (all types and surface treatments), Aluminum, Exothermic in contact with water, Reacts violently with:, Alkali metals

#### **Hazardous decomposition products**

Other decomposition products - No data available

In the event of fire: see section 5

### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

##### **Acute toxicity**

No data available

LC50 Inhalation - Rat - 10.000 mg/m<sup>3</sup>

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation. Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Dyspnea.

##### **Skin corrosion/irritation**

No data available

##### **Serious eye damage/eye irritation**

No data available

##### **Respiratory or skin sensitisation**

No data available

##### **Germ cell mutagenicity**

No data available

##### **Carcinogenicity**

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.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: AJ9625000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

Liver - Irregularities - Based on Human Evidence

**SECTION 12: Ecological information****Toxicity**

Toxicity to fish	LC50 - Danio rerio (zebra fish) - > 1.000 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 55,00 mg/l - 24 h
Toxicity to algae	- Desmodesmus subspicatus (Scenedesmus subspicatus) - > 100 mg/l - 72 h (OECD Test Guideline 201)

**Persistence and degradability**

Biodegradability Result: - Not readily biodegradable.  
(OECD Test Guideline 301D)  
Remarks: No data available

**Bioaccumulative potential**

No bioaccumulation is to be expected (log Pow <= 4).

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects**

Harmful to aquatic life with long lasting effects.

No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information**

**UN number**

ADR/RID: 2699

IMDG: 2699

IATA: 2699

**UN proper shipping name**

ADR/RID: TRIFLUOROACETIC ACID

IMDG: TRIFLUOROACETIC ACID

IATA: Trifluoroacetic acid

**14.3 Transport hazard class(es)**

ADR/RID: 8

IMDG: 8

IATA: 8

**14.4 Packaging group**

ADR/RID: I

IMDG: I

IATA: I

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

No data available

**SECTION 15: Regulatory information**

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

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available

**Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox.	Acute toxicity
Aquatic Chronic	Chronic aquatic toxicity
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects.
Skin Corr.	Skin corrosion

**Full text of R-phrases referred to under sections 2 and 3**

C	Corrosive
R20	Harmful by inhalation.
R35	Causes severe burns.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Qualikems Lifesciences Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.qualikems.com](http://www.qualikems.com) for additional terms and conditions of sale.