

Creation Date 08-Apr-2009

Revision Date 16-Nov-2010

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Description:** 2,4,5-Trifluorobenzaldehyde  
**Cat No.** 384190000; 384190010; 384190050

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

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

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaal 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

#### Emergency Telephone Number

For information in the US, call: 800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300  
 CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 3

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

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

**Symbol(s)** Xn - Harmful  
**R -phrase(s)** R22 - Harmful if swallowed  
**Risk Combination Phrases** R36/37/38 - Irritating to eyes, respiratory system and skin

## 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

### Warning

### Hazard Statements

H319 - Causes serious eye irritation  
 H315 - Causes skin irritation  
 H335 - May cause respiratory irritation  
 H302 - Harmful if swallowed  
 H226 - Flammable liquid and vapor

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 P302+ P352 - IF ON SKIN: Wash with plenty of soap and water  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
2,4,5-Trifluorobenzaldehyde 165047-24-5		100	165047-24-5	Xn; R22 Xi; R36/37/38;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	-

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

#### 4. FIRST AID MEASURES

**Description of first aid measures****Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes Obtain medical attention

**Ingestion**

Do not induce vomiting Call a physician or Poison Control Center immediately

**Inhalation**

Move to fresh air If breathing is difficult, give oxygen Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device Obtain medical attention

**Notes to Physician**

Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

**Extinguishing media****Suitable Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide Cool closed containers exposed to fire with water spray

**Extinguishing media which must not be used for safety reasons**

No information available.

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

Combustible material Containers may explode when heated

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear Thermal decomposition can lead to release of irritating gases and vapors

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment Remove all sources of ignition Take precautionary measures against static discharges

**Environmental precautions**

Should not be released into the environment

**Methods and material for containment and cleaning up**

Soak up with inert absorbent material Keep in suitable and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

#### 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Wear personal protective equipment Ensure adequate ventilation Do not get in eyes, on skin, or on clothing Avoid ingestion and inhalation Keep away from open flames, hot surfaces and sources of ignition Use only non-sparking tools Use explosion-proof equipment Take precautionary measures against static discharges

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

Keep containers tightly closed in a dry, cool and well-ventilated place Keep away from heat and sources of ignition Store under an inert atmosphere

Specific End Uses**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parametersExposure limits

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

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controlsEngineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas Use explosion-proof electrical/ventilating/lighting/equipment

Personal protective equipmentEye Protection

Safety glasses with side-shields

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No information available.

**9. PHYSICAL AND CHEMICAL PROPERTIES**Physical State

Liquid

odor

Characteristic

pH

No information available.

Boiling Point/Range

168°C / 334.4°F

Melting Point/Range

No information available.

Flash Point

58°C / 136.4°F

Specific Gravity

1.408

Molecular Formula

C7 H3 F3 O

Molecular Weight

160.09

**10. STABILITY AND REACTIVITY**ReactivityChemical Stability

Air sensitive.

Possibility of Hazardous ReactionsHazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

None under normal processing..

Conditions to Avoid

Incompatible products, Excess heat, Keep away from open flames, hot surfaces and sources of ignition, Exposure to air.

Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

#### **Component Information**

#### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

#### **Sensitization**

No information available.

#### **Mutagenic Effects**

No information available

#### **Reproductive Effects**

No information available.

#### **Developmental Effects**

No information available.

#### **Target Organs**

Skin Respiratory system Eyes

#### **Other Adverse Effects**

The toxicological properties have not been fully investigated.

#### **Endocrine Disruptor Information**

None known

## 12. ECOLOGICAL INFORMATION

#### Toxicity

**Ecotoxicity effects** Do not empty into drains

#### Persistence and degradability

No information available

#### Bioaccumulative potential

No information available.

#### Mobility in soil

No information available.

#### Results of PBT and vPvB assessment

#### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

#### IMDG/IMO

**14. TRANSPORT INFORMATION**

UN-No	UN1989
Hazard Class	3
Packing Group	III
Proper Shipping Name	ALDEHYDES, N.O.S.

**ADR**

UN-No	UN1989
Hazard Class	3
Packing Group	III
Proper Shipping Name	ALDEHYDES, N.O.S.

**IATA**

UN-No	UN1989
Hazard Class	3
Packing Group	III
Proper Shipping Name	ALDEHYDES, N.O.S.

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories****Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory Lists**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****16. OTHER INFORMATION****Text of R phrases mentioned in Section 2-3**

R22 - Harmful if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

**Revision Date** 16-Nov-2010**Revision Summary** Not applicable**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**16. OTHER INFORMATION****Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet