

Creation Date 17-Aug-2011

Revision Date 05-Dec-2011

Revision Number 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

Product Description: DL-2-Amino-1,1,1-trifluoro-3-methylbutane  
Cat No. 432570000; 432570050

### 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 Pharmaceuticaaan 3a  
2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

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

|                           |              |
|---------------------------|--------------|
| Acute oral toxicity       | Category 4   |
| Skin Corrosion/irritation | Category 1 B |
| Flammable liquids.        | Category 2   |

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

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

#### Symbol(s)

C - Corrosive

#### R-phrases(s)

F - Highly flammable

R11 - Highly flammable

R22 - Harmful if swallowed

R34 - Causes burns

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## SECTION 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H225 - Highly flammable liquid and vapor

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

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

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P310 - 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

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component  | EC-No. | Weight % | CAS-No    | 67/548/EEC Classification   | CLP Classification - Regulation (EC) No 1272/2008                           | REACH No. |
|--|--------|----------|-----------|-----------------------------|---|-----------|
| DL-2-Amino-1,1,1-trifluoro-3-methylbutane<br>1582-18-9 |        | >95      | 1582-18-9 | F; R11<br>C; R34<br>Xn; R22 | Flam. Liq. 2<br>(H225)<br>Skin Corr. 1B<br>(H314)<br>Acute Tox. 4<br>(H302) | -         |

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

## SECTION 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. Immediate medical attention is required.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required.

#### **Ingestion**

Do not induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. 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. Immediate medical attention is required.

#### **Notes to Physician**

Treat symptomatically

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. 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

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. The product causes burns of eyes, skin and mucous membranes.

### 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.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

### Environmental precautions

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Should not be released into the environment.

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

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

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Do not breathe vapors/dust. Do not ingest. 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. Store under an inert atmosphere. Corrosives area. Flammables area. Keep away from heat and sources of ignition.

### **Specific End Uses**

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **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 limit values**

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.

### **Exposure controls**

#### **Engineering Measures**

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location Use explosion-proof electrical/ventilating/lighting/equipment

#### **Personal protective equipment**

##### **Eye 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.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

|                          |  |
|--------------------------|--|
| Physical State           | Liquid                                 |
| Appearance               | Colorless                              |
| odor                     | No information available               |
| pH                       | No information available.              |
| Boiling Point/Range      | 83 - 84°C / 181.4 - 183.2°F @ 760 mmHg |
| Melting Point/Range      | No information available.              |
| Flash Point              | No information available.              |
| Autoignition Temperature | No information available.              |
| Molecular Formula        | C5 H10 F3 N                            |
| Molecular Weight         | 141.14                                 |

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

### Chemical Stability

Stable under recommended storage conditions. Air sensitive.

### Possibility of Hazardous Reactions

|                          |  |
|--------------------------|--|
| Hazardous 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.

### Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases.

### Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Hydrogen fluoride.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

### Acute Toxicity

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

**Component Information**

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**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 Gastrointestinal tract (GI)  
**Endocrine Disruptor Information** None known

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity**

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**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

**SECTION 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 to local recyclers for disposal

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## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

|                         |   |
|-------------------------|---|
| UN-No                   | UN2733  |
| Hazard Class            | 3   |
| Subsidiary Hazard Class | 8   |
| Packing Group           | II  |
| Proper Shipping Name    | Amines or polyamines, flammable, corrosive, n.o.s |

### ADR

|                         |   |
|-------------------------|---|
| UN-No                   | UN2733  |
| Hazard Class            | 3   |
| Subsidiary Hazard Class | 8   |
| Packing Group           | II  |
| Proper Shipping Name    | Amines or polyamines, flammable, corrosive, n.o.s |

### IATA

|                         |   |
|-------------------------|---|
| UN-No                   | UN2733  |
| Hazard Class            | 3   |
| Subsidiary Hazard Class | 8   |
| Packing Group           | II  |
| Proper Shipping Name    | Amines or polyamines, flammable, corrosive, n.o.s |

## SECTION 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 of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**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

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**SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R11 - Highly flammable

R22 - Harmful if swallowed

R34 - Causes burns

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Revision Summary Not applicable

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

**Disclaimer**

The information provided on this Safety Data Sheet 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