

Creation Date 14-Oct-2010

Revision Date 27-Feb-2012

Revision Number 4

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

**Product Identifier**

**Product Description:** 1-Cyclohexenylacetonitrile  
**Cat No.** 111250000; 111250100  
**Synonyms** 1-Cyclohexene-1-acetonitrile

**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
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3

**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)** Xn - Harmful

**R-phrases(s)**

**Risk Combination Phrases** R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed  
 R36/37/38 - Irritating to eyes, respiratory system and skin

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**SECTION 2. HAZARDS IDENTIFICATION**

Label Elements



**Signal Word**

**Warning**

**Hazard Statements**

- H302 - Harmful if swallowed
- H312 - Harmful in contact with skin
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H332 - Harmful if inhaled
- H315 - Causes skin irritation

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

- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

**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.
1-Cyclohexene-1-acetonitrile 6975-71-9	EEC No. 230-235-6	>90	6975-71-9	Xn; R20/21/22 Xi; R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)	-

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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. Immediate medical attention is required.

#### **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. Immediate medical attention is required.

#### **Notes to Physician**

Treat symptomatically

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

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

#### **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. Keep product and empty container away from heat and sources of ignition.

#### **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. Remove all sources of ignition. Do not get in eyes, on skin, or on clothing.

### Environmental precautions

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Should not be released into the environment.

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

Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal..

**SECTION 7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

Use only under a chemical fume hood. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest.

**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.

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

**Personal protective equipment**

- Eye Protection** Goggles
- 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**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Yellow-orange
<b>odor</b>	No information available
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	144 - 144°C / 291.2 - 291.2°F @ 90 mmHg
<b>Melting Point/Range</b>	No information available.
<b>Flash Point</b>	83°C / 181.4°F
<b>Autoignition Temperature</b>	No information available.
<b>Specific Gravity</b>	0.940
<b>Density</b>	0.947 g/mL
<b>Molecular Formula</b>	C8 H11 N
<b>Molecular Weight</b>	121.18

**SECTION 10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions .</b>	No information available.

**Conditions to Avoid**

Incompatible products, Heat, flames and sparks.

**Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating gases and vapors. Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity**

<b>Product Information</b>	No acute toxicity information is available for this product
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**Contaminated Packaging** Empty containers should be taken to local recyclers for disposal

**SECTION 14. TRANSPORT INFORMATION**

**IMDG/IMO**

**UN-No** UN3276  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** NITRILES, TOXIC, LIQUID, N.O.S.

**ADR**

**UN-No** UN3276  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** NITRILES, TOXIC, LIQUID, N.O.S.

**IATA**

**UN-No** UN3276  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** NITRILES, TOXIC, LIQUID, N.O.S.\*

**SECTION 15. REGULATORY INFORMATION**

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

**International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
1-Cyclohexene-1-acetonitrile	230-235-6	-		X	-	X	-	-	-	-	-

**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/NDSL** - 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

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

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

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

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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