

Revision Date 03-Oct-2012

Revision Number 2

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

**Product Identifier**

**Product Description:** 4-Cyanophenyl isocyanate  
**Cat No.** 405970000; 405970010; 405970050; 405970250  
**Synonyms** None.

**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** [begele.sdsdesk@thermofisher.com](mailto:begele.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 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**

- H312 - Harmful in contact with skin
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H315 - Causes skin irritation
- H302 - Harmful if swallowed
- H319 - Causes serious eye 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
- P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- 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

**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.

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Benzonitrile, 4-isocyanato- 40465-45-0	EEC No. 254-934-0	95	40465-45-0	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**
**General Advice**

If symptoms persist, call a physician Show this safety data sheet to the doctor in attendance  
Do not breathe dust/fume/gas/mist/vapors/spray Do not get in eyes, on skin, or on clothing

**Eye Contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact**

Remove and wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately. **SPEEDY ACTION IS CRITICAL, GET MEDICAL AID IMMEDIATELY..** If symptoms persist, call a physician. If skin irritation persists, call a physician.

**Ingestion**

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do not induce vomiting. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.

**Inhalation**

Move to fresh air. Consult a physician. If breathing is irregular or stopped, administer artificial respiration. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

**Protection of First-aiders  
Notes to Physician**

Use personal protective equipment  
Treat symptomatically

### SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

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**Suitable Extinguishing Media**Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.**Extinguishing media which must not be used for safety reasons**

No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas.. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal.

**SECTION 7. HANDLING AND STORAGE****Precautions for Safe Handling**

Do not breathe dust. Avoid contact with skin and eyes.

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

Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere.

**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.

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**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 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 Long sleeved clothing Impervious gloves  
**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** When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

**Environmental exposure controls** Do not allow material to contaminate ground water system

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid
<b>Appearance</b>	Off-white
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	102.00°C / 215.6°F
<b>Flash Point</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Water Solubility</b>	insoluble (dec)
<b>Molecular Formula</b>	C8 H4 N2 O
<b>Molecular Weight</b>	144.13

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

Moisture sensitive.

#### Possibility of Hazardous Reactions

**Hazardous Polymerization** No information available  
**Hazardous Reactions .** No information available.

#### Conditions to Avoid

Incompatible products, Exposure to moist air or water.

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**Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases.

**Hazardous Decomposition Products**Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen cyanide (hydrocyanic acid).**SECTION 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**

No information available.

**Other Adverse Effects**

The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information**

None known

**SECTION 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**

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**SECTION 12. ECOLOGICAL INFORMATION**

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  
**Other Information** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific Waste codes should be assigned by the user based on the application for which the product was used

**SECTION 14. TRANSPORT INFORMATION**
**IMDG/IMO**

**UN-No** UN2206  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** Isocyanates, toxic, n.o.s

**ADR**

**UN-No** UN2206  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** Isocyanates, toxic, n.o.s

**IATA**

**UN-No** UN2206  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** Isocyanates, toxic, 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
Benzonitrile, 4-isocyanato-	254-934-0	-		X	-	X	-	-	-	-	-

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**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**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

Reason for revision (M)SDS sections updated, 7, 14.

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