



SAFETY DATA SHEET

Creation Date 19-May-2009

Revision Date 07-Mar-2012

Revision Number 3

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

Product Identifier

Product Description: (+/-)-cis-1,2-Diaminocyclohexane
Cat No. 248660000; 248660010; 248660050

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

Skin Corrosion/irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1

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) R34 - Causes burns

Label Elements

(+/-)-cis-1,2-Diaminocyclohexane

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SECTION 2. HAZARDS IDENTIFICATION



Signal Word

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

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

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

P280 - Wear 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

P310 - Immediately call a POISON CENTER or doctor/ physician

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.
1,2-Cyclohexanediamine 1436-59-5		95-100	1436-59-5	C; R34	Skin Corr. 1B (H314)	-

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

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.



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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	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.
Protection of First-aiders Notes to Physician	Use personal protective equipment Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

CO₂, 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

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.

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

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. Corrosives area. Keep away from heat and sources of ignition. Keep under nitrogen.

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 When using, do not eat, drink or smoke Provide regular cleaning of equipment, work area and clothing

Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Colorless
pH	No information available.
Vapor Pressure	0.4 mmHg @ 20°C
Boiling Point/Range	92°C / 197.6°F @ 14 mbar
Melting Point/Range	No information available.
Flash Point	70°C / 158°F
Autoignition Temperature	No information available.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Water Solubility	soluble
Specific Gravity	0.952
Molecular Formula	C6 H14 N2
Molecular Weight	114.19

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

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, Exposure to air.

Incompatible Materials

Strong oxidizing agents, Acids, Acid chlorides, Acid anhydrides.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x).**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.

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SECTION 11. TOXICOLOGICAL INFORMATION

Developmental Effects	No information available.
Target Organs	Skin Respiratory system Eyes Gastrointestinal tract (GI)
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**

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

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

UN-No	UN2735
Hazard Class	8
Packing Group	II
Proper Shipping Name	Amines or polyamines, liquid, corrosive, n.o.s

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SECTION 14. TRANSPORT INFORMATION
ADR

UN-No	UN2735
Hazard Class	8
Packing Group	II
Proper Shipping Name	Amines or polyamines, liquid, corrosive, n.o.s

IATA

UN-No	UN2735
Hazard Class	8
Packing Group	II
Proper Shipping Name	Amines or polyamines, liquid, corrosive, 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
1,2-Cyclohexanediamine	-	-		-	-	-	-	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

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

R34 - Causes burns

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SECTION 16. OTHER INFORMATION

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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