

Revision Date 16-Apr-2012

Revision Number 2

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

Product Identifier

Product Description: cis-1,2-Dichloroethylene
Cat No. 113380000; 113380025; 113380100
Synonyms cis-Acetylene dichloride.

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 Inhalation Toxicity - Vapors	Category 4
Chronic aquatic toxicity	Category 3
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) F - Highly flammable
 Xn - Harmful
R-phrases R11 - Highly flammable
 R20 - Harmful by inhalation
Risk Combination Phrases R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

cis-1,2-Dichloroethylene

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SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H332 - Harmful if inhaled

H412 - Harmful to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapor

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

P273 - Avoid release to the environment

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

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

P240 - Ground/Bond container and receiving equipment

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.
cis-1,2-Dichloroethylene 156-59-2	EEC No. 205-859-7	97	156-59-2	F; R11 Xn; R20 R52-53	Acute Tox. 4 (H332)	-

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

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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. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Ingestion

Clean mouth with water. Get medical attention.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

Notes to Physician

Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES**Extinguishing media****Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO₂). Dry chemical. Use water spray to cool unopened containers. chemical foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable. Vapors may travel to source of ignition and flash back.

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**

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. Use explosion-proof equipment. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Flammables area.

Specific End Uses

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component

cis-1,2-Dichloroethylene

European Union	The United Kingdom	France	Belgium	Spain
	STEL: 250 ppm 15 min STEL: 1010 mg/m ³ 15 min TWA: 200 ppm 8 hr TWA: 806 mg/m ³ 8 hr			

Component

cis-1,2-Dichloroethylene

Italy	Germany	Portugal	The Netherlands	Finland
	MAK: 200 ppm 8 Stunden. MAK: 800 mg/m ³ 8 Stunden. Peak: 400 ppm Peak: 1600 mg/m ³	TWA: 200 ppm 8 horas		TWA: 200 ppm 8 tunteina TWA: 800 mg/m ³ 8 tunteina STEL: 250 ppm 15 minuutteina STEL: 1000 mg/m ³ 15 minuutteina

Component

cis-1,2-Dichloroethylene

Austria	Denmark	Switzerland	Poland	Norway
STEL: 800 ppm 15 Minuten STEL: 3160 mg/m ³ 15 Minuten TWA: 200 ppm 8 Stunden TWA: 790 mg/m ³ 8 Stunden	TWA: 790 mg/m ³ 8 timer TWA: 200 ppm 8 timer	STEL: 400 ppm 15 Minuten STEL: 1580 mg/m ³ 15 Minuten MAK: 200 ppm 8 Stunden MAK: 790 mg/m ³ 8 Stunden	NDS: 700 mg/m ³ 8 godzinach	

Component

cis-1,2-Dichloroethylene

Estonia	Gibraltar	Greece	Hungary	Iceland
				TWA: 200 ppm 8 klukkustundum. TWA: 790 mg/m ³ 8 klukkustundum. Ceiling: 400 ppm Ceiling: 1580 mg/m ³

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Component
cis-1,2-
Dichloroethylene

Russia - TWA	Slovak Republic	Slovenia	Sweden	Turkey
		TWA: 200 ppm 8 urah TWA: 800 mg/m ³ 8 urah STEL: 800 ppm 15 minutah STEL: 3200 mg/m ³ 15 minutah		

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

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Appearance

Colorless

odor

aromatic

pH

No information available.

Vapor Pressure

201 mmHg @ 25 °C

Vapor Density

3.34 (Air = 1.0)

Boiling Point/Range

60°C / 140°F @ 760 mmHg

Melting Point/Range

-80°C / -112°F

Flash Point

6°C / 42.8°F

Autoignition Temperature

440°C / 824°F

Specific Gravity

1.280

Molecular Formula

C₂ H₂ Cl₂

Molecular Weight

96.94

SECTION 10. STABILITY AND REACTIVITY

cis-1,2-Dichloroethylene

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SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization
Hazardous Reactions .

Hazardous polymerization does not occur.
No information available.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Exposure to air, Exposure to light, Incompatible products, Exposure to moist air or water.

Incompatible Materials

Bases.

Hazardous Decomposition Products

Hydrogen chloride gas. Carbon monoxide (CO). Carbon dioxide (CO₂).

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. See actual entry in RTECS for complete information

Endocrine Disruptor Information

None known

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SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
cis-1,2-Dichloroethylene			EC50 = 721 mg/L 5 min EC50 = 905 mg/L 30 min	

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	1150
Hazard Class	3
Packing Group	II
Proper Shipping Name	1,2-DICHLOROETHYLENE

ADR

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SECTION 14. TRANSPORT INFORMATION

UN-No 1150
Hazard Class 3
Packing Group II
Proper Shipping Name 1,2-DICHLOROETHYLENE

IATA

UN-No 1150
Hazard Class 3
Packing Group II
Proper Shipping Name 1,2-DICHLOROETHYLENE

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
cis-1,2-Dichloroethylene	205-859-7	-		X	-	X	-	X	X	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

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R11 - Highly flammable

R20 - Harmful by inhalation

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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SECTION 16. OTHER INFORMATION

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Revision Summary

Reason for revision 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