



SAFETY DATA SHEET

Creation Date 09-Nov-2010

Revision Date 14-Mar-2012

Revision Number 4

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

Product Identifier

Product Description:

Cyclohexane-d12

Cat No.

166280000; 166280010; 166280050

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

Aspiration Toxicity	Category 1
Skin Corrosion/Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1
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

N - Dangerous for the environment

R-phrases(s)

R11 - Highly flammable

R38 - Irritating to skin

R65 - Harmful: may cause lung damage if swallowed

R67 - Vapors may cause drowsiness and dizziness

Risk Combination Phrases

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Cyclohexane-d12

Revision Date 14-Mar-2012

SECTION 2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H304 - May be fatal if swallowed and enters airways
H225 - Highly flammable liquid and vapor

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

P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician
P273 - Avoid release to the environment
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
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.

Cyclohexane-d12

Revision Date 14-Mar-2012

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

[2H12]Cyclohexane 1735-17-7	EEC No. 217-077-3	>95	1735-17-7	F; R11 Xi; R38 N; R50/53 Xn; R65 R67	Flam. Liq. 2 (H225) STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-
--------------------------------	-------------------	-----	-----------	--	---	---

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. Do not rub affected area.. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. Clean mouth with water. Aspiration hazard. If possible drink milk afterwards.

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

Cool closed containers exposed to fire with water spray. Carbon dioxide (CO₂). Dry chemical. This material is lighter than water and insoluble in water. The fire could easily be spread by the use of water in an area where the water cannot be contained.. chemical foam.

Extinguishing media which must not be used for safety reasons

Water may be ineffective.

Special hazards arising from the substance or mixture

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

Cyclohexane-d12

Revision Date 14-Mar-2012

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). Prevent product from entering drains. Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.. Wear self-contained breathing apparatus and protective suit. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not flush into surface water or sanitary sewer system.

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

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or mists. Do not ingest. Use only in area provided with appropriate exhaust ventilation. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use explosion-proof equipment. Use only non-sparking tools. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

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. 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.

Cyclohexane-d12

Revision Date 14-Mar-2012

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

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

sweet

pH

No information available.

Boiling Point/Range

78°C / 172.4°F

Melting Point/Range

6.5°C / 43.7°F

Flash Point

-18°C / -0.4°F

Autoignition Temperature

245°C / 473°F

Specific Gravity

0.890

Molecular Formula

C6 D12

Molecular Weight

96.26

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Hygroscopic. Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions .

No information available.

Conditions to Avoid

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

Incompatible Materials

Strong oxidizing agents, nitrogen oxides (NOx).

Cyclohexane-d12

Revision Date 14-Mar-2012

Hazardous Decomposition ProductsCarbon oxides. 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.
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.

Cyclohexane-d12

Revision Date 14-Mar-2012

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 1145
Hazard Class 3
Packing Group II
Proper Shipping Name CYCLOHEXANE

ADR

UN-No 1145
Hazard Class 3
Packing Group II
Proper Shipping Name CYCLOHEXANE

IATA

UN-No 1145
Hazard Class 3
Packing Group II
Proper Shipping Name CYCLOHEXANE

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
[2H12]Cyclohexane	217-077-3	-		-	-	-	-	-	-	-	-

Cyclohexane-d12**Revision Date 14-Mar-2012****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

R38 - Irritating to skin

R65 - Harmful: may cause lung damage if swallowed

R67 - Vapors may cause drowsiness and dizziness

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Revision Date 14-Mar-2012**Revision Summary** (M)SDS sections updated, 2.**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