

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/12/2015 Version: 1.0

SECTION 1: Identification

Identification

Product form : Substance

Cyclohexaneethanol Substance name

CAS-No. 4442-79-9 Product code : (US) W0358 Formula C8H160

Cyclohexane, 1-(2-hydroxyethyl)- / Cyclohexylethanol / Ethanol, 2-cyclohexyl- / 2-Synonyms

Cyclohexylethan-1-ol / 2-Cyclohexylethanol / 2-Cyclohexylethyl alcohol

Recommended use and restrictions on use

No additional information available

Supplier

Synerzine 5340 Hwy 42 S

Ellenwood, Georgia 30294 - USA T 404-524-6744 - F 404-577-1651

info@synerzine.com - www.synerzine.com

Emergency telephone number

: Infotrac 1-800-535-5053 (Contract# 102471) Dial +1-352-323-3500 when outside the US Emergency number

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Flammable liquids Category H227 Combustible liquid

Acute toxicity (oral) H302 Harmful if swallowed

Category 4

Acute toxicity (dermal) H312 Harmful in contact with skin

Category 4

Full text of H statements: see section 16

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Warning

: H227 - Combustible liquid Hazard statements (GHS-US)

H302+H312 - Harmful if swallowed or in contact with skin

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking. heat, hot surfaces, open flames, sparks

P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

P280 - Wear eye protection, face protection, protective clothing, protective gloves. P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell

P302+P352 - If on skin: Wash with plenty of soap and water

P312 - Call a doctor, a POISON CENTER if you feel unwell P321 - Specific treatment (see supplemental first aid instructions on this label)

P330 - Rinse mouth.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry sand to

extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container to an approved waste disposal plant

06/22/2018 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	GHS-US classification
Cyclohexaneethanol (Main constituent)	(CAS-No.) 4442-79-9	99 - 100	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302
			Acute Tox. 4 (Dermal), H312

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

06/22/2018 EN (English US) 2/6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. Wear personal protective equipment. Do not get in

eyes, on skin, or on clothing.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : A clear, colorless liquid.

Color : colorless
Odor : Floral

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available

Boiling point : 206 - 207 °C
Flash point : 187 °F TCC
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Not applicable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : No data available
Specific gravity / density : 0.919 g/cm³
Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available

06/22/2018 EN (English US) 3/6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Cyclohexaneethanol (4442-79-9)	
LD50 oral rat	940 mg/kg
ATE US (oral)	940 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight

Skin corrosion/irritation : Not classified Not classified Serious eye damage/irritation Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Not classified Carcinogenicity Reproductive toxicity Not classified Specific target organ toxicity - single exposure : Not classified Specific target organ toxicity – repeated exposure : Not classified Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

06/22/2018 EN (English US) 4/6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

: NA1993 Combustible liquid, n.o.s., 3, III Transport document description

UN-No.(DOT) : NA1993

Proper Shipping Name (DOT) : Combustible liquid, n.o.s.

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 Class (DOT)

Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN requiring

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite DOT Special Provisions (49 CFR 172.102)

(31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for

UN2672).

T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature

during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx)

DOT Quantity Limitations Passenger aircraft/rail

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

: 220 L

DOT Vessel Stowage Location

: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

Cyclohexaneethanol (4442-79-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

06/22/2018 EN (English US) 5/6

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

Cyclohexaneethanol (4442-79-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Cyclohexaneethanol (4442-79-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Cyclohexaneethanol (4442-79-9)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Full text of H-phrases:

H227	Combustible liquid
Н302	Harmful if swallowed
Н312	Harmful in contact with skin

NFPA health hazard

: 1 - Materials that, under emergency conditions, can cause significant irritation.

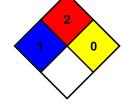
NFPA fire hazard

: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can

occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

 $: 2\ Moderate\ Hazard\ -\ Materials\ which\ must\ be\ moderately\ heated\ or\ exposed\ to\ high\ ambient\ temperatures\ before\ ignition\ will\ occur.\ Includes\ liquids\ having\ a\ flash\ point\ at\ or\ above\ 100\ F\ but$

below 200 F. (Classes II & IIIA)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: B

B - Safety glasses, Gloves

Synerzine US

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

06/22/2018 EN (English US) 6/6