

## SAFETY DATA SHEET

Creation Date 23-Mar-2012 Revision Date 13-Sep-2024 Revision Number 5

### 1. Identification

Product Name Ethylcyclohexane

Cat No.: AC118310000; AC118310050; AC118310250; AC118311000

**CAS No** 1678-91-7

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

**Emergency Telephone Number** 

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 2
Specific target organ toxicity (single exposure) Category 3

Target Organs - Central nervous system (CNS).

Aspiration Toxicity Category 1

#### Label Elements

### Signal Word

Danger

### **Hazard Statements**

Highly flammable liquid and vapor May be fatal if swallowed and enters airways May cause drowsiness or dizziness

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Ethylcyclohexane



### **Precautionary Statements**

#### Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Wear protective gloves/protective clothing/eye protection/face protection

Keep cool

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

### Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life

Toxic to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Ethyl cyclohexane	1678-91-7	>95

#### 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial

respiration. Risk of serious damage to the lungs (by aspiration).

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician or poison control center immediately. If vomiting occurs naturally, have victim

lean forward.

Most important symptoms and

effects

None reasonably foreseeable. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire

Flash Point 18 °C / 64.4 °F

Method - No information available

Autoignition Temperature 262 °C / 503.6 °F

**Explosion Limits** 

**Upper** .01% **Lower** .07%

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air. Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

### **Protective Equipment and Precautions for Firefighters**

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

NFPA

HealthFlammabilityInstabilityPhysical hazards330N/A

#### 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Remove all

sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities

should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up**Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 7. Handling and storage

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Take precautionary measures against static discharges.

**Storage.** Keep container tightly closed in a dry and well-ventilated place. Keep away from heat,

sparks and flame.

### 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure adequate ventilation, especially in confined areas. Use explosion-proof

electrical/ventilating/lighting equipment.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

**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.

**Recommended Filter type:** Organic gases and vapours filter. Type A. Brown. conforming to EN14387.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

Physical StateLiquidAppearanceColorlessOdoraromatic

Odor Threshold

pH

No information available
No information available

Melting Point/Range -111 °C / -167.8 °F

Boiling Point/Range 130 - 132 °C / 266 - 269.6 °F

Flash Point 18 °C / 64.4 °F

Evaporation Rate No information available Flammability (solid,qas) Not applicable

Flammability or explosive limits

**Upper** .01% **Lower** .07%

Vapor Pressure No information available

Vapor Density3.87Specific Gravity0.780

SolubilityInsoluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition Temperature262 °C / 503.6 °FDecomposition TemperatureNo information available

Viscosity

No information available

Molecular Formula

C8 H16

Molecular FormulaC8 H16Molecular Weight112.21

## 10. Stability and reactivity

**Reactive Hazard**None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Excess heat. Incompatible products. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO<sub>2</sub>), Carbon dioxide (CO<sub>2</sub>)

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

### 11. Toxicological information

**Acute Toxicity** 

Product Information No acute toxicity information is available for this product

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	
Ethyl cyclohexane	Not listed	LD50 > 2000 mg/kg (Rat)	Not listed	

**Toxicologically Synergistic** 

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No information available

**Irritation** No information available

Sensitization No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Ethyl cyclohexane	1678-91-7	Not listed				

Mutagenic Effects No information available

Reproductive Effects No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Central nervous system (CNS)

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and

delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

### 12. Ecological information

**Ecotoxicity** 

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Persistence and Degradability May persist

**Bioaccumulation/ Accumulation** No information available.

Mobility Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the

environment due to its volatility.

Component	log Pow
Ethyl cyclohexane	4.56

### 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

DOT

UN-No UN3295

Proper Shipping Name HYDROCARBONS, LIQUID, N.O.S.

Hazard Class 3
Packing Group ||

TDG

UN-No UN3295

Proper Shipping Name HYDROCARBONS, LIQUID, N.O.S.

Hazard Class 3
Packing Group ||

<u>IATA</u>

UN-No UN3295

Proper Shipping Name HYDROCARBONS, LIQUID, N.O.S.

Hazard Class 3 Packing Group II

IMDG/IMO

UN-No UN3295

Proper Shipping Name HYDROCARBONS, LIQUID, N.O.S.

Hazard Class 3
Packing Group ||

### 15. Regulatory information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Ethyl cyclohexane	1678-91-7	X	ACTIVE	PMN

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

PMN - Indicates a commenced PMN substance

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

Substances & Mixtures, Under 15CA Section 6(n) (PB1)

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Ethyl cyclohexane	1678-91-7	-	Х	216-835-0	-	Χ	Х	Х	Х	KE-13575

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Should this product meet EPČRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Not applicable

Health Administration

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65** 

This product does not contain any Proposition 65 chemicals.

# U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl cyclohexane	X	X	X	=	=

#### **U.S.** Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Serious risk, Grade 3

Authorisation/Restrictions according to EU REACH Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Ethyl cyclohexane	1678-91-7	-	-	-

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#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic	Ozone Depletion	Restriction of
			Pollutant	Potential	Hazardous Substances (RoHS)
Ethyl cyclohexane	1678-91-7	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

#### Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		for Major Accident Notification Requirements			
Ethyl cyclohexane	1678-91-7	Not applicable	Not applicable	Not applicable	Not applicable

### 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

**End of SDS**