



# 杭州大阳化工有限公司

Hangzhou Dayangchem Co., Ltd.

## Safety Data Sheet

No :M-5585

### Section 1 - Product and Company Identification

**MSDS Name:** Ethylbenzene

**Synonyms:**

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses : Laboratory chemicals, Manufacture of substances

**Company Identification:** Hangzhou Dayangchem Co., Ltd.

**For information, call:** 86-571-88938639

**For information,E-mail:** infores@chinadayangchem.com

**Emergency Number:** 86-571-88938639

**For CHEMTREC assistance, call:** 86-571-88938639; FAX:86-571-88938652

### Section 2 – Hazards Identification

**Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Flammable liquids (Category 2), H225

Acute toxicity, Inhalation (Category 4), H332

Specific target organ toxicity - repeated exposure (Category 2), hearing organs, H373

Aspiration hazard (Category 1), H304

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Label elements

### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Danger

#### Hazard statement(s)

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H332 Harmful if inhaled.

H373 May cause damage to organs (hearing organs) through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P331 Do NOT induce vomiting.

**Other hazards**-This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## Section 3 – Composition/Information on Ingredients

### Substances

Formula : C<sub>8</sub>H<sub>10</sub>

Molecular weight : 106.17 g/mol

CAS#	Chemical Name	%	EINECS#	Classification
100-41-4	Ethylbenzene	99.5	202-849-4	Flam. Liq. 2; Acute Tox. 4; STOT RE 2; Asp. Tox. 1; Aquatic Chronic 3; H225, H332, H373, H304, H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Section 4 - First Aid Measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## Section 5 - Fire Fighting Measures

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides

## Section 6 - Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Spills/Leaks:** Contain spillage, soak up with non-combustible absorbent material, (e.g. sand,

earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

## Section 7 - Handling and Storage

**Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Storage:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hygroscopic

## Section 8 - Exposure Controls, Personal Protection

### Control parameters

#### Components with workplace control parameters

Component	CAS-No.	ValueForm of exposure	Control parameters	Basis
Ethylbenzene	100-41-4	TWA	100 ppm 442 mg/m <sup>3</sup>	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
	Remarks	Identifies the possibility of significant uptake through the skin Indicative		
		STEL	200 ppm 884 mg/m <sup>3</sup>	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
		Identifies the possibility of significant uptake through the skin Indicative		
		TWA	100 ppm 441 mg/m <sup>3</sup>	UK. EH40 WEL - Workplace Exposure Limits
		Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
		STEL	125 ppm 552 mg/m <sup>3</sup>	UK. EH40 WEL - Workplace Exposure Limits
		Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		

### Personal Protective Equipment

**Eyes:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Clothing:** Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respirators:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Section 9 - Physical and Chemical Properties

**Physical State:** liquid

**Color:** colourless to light yellow

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** 13.3 hPa at 20.0 °C

**Viscosity:** 0.773 mm<sup>2</sup>/s at 20 °C -

**Boiling Point:** 136 °C - lit.

**Freezing/Melting Point:** -95 °C - lit.

**Autoignition Temperature:** 432.0 °C

**Flash Point:** 15.0 °C - closed cup

**Explosion Limits:Lower:** 1 %(V)

**Explosion Limits Upper:** 6.7 %(V)

**Decomposition Temperature:** Not available.

**Solubility in water:** 0.2 g/l at 25 °C - slightly soluble

**Specific Gravity/Density:** 0.867 g/cm<sup>3</sup> at 25 °C

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Heat, flames and sparks.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

## Section 11 - Toxicological Information

**RTECS#:** CAS# 100-41-4: DA0700000

**LD50/LC50:** RTECS: LD50 Oral - Rat - male and female - 3,500 mg/kg

LD50 Dermal - Rabbit - 15,433 mg/kg

**Carcinogenicity:** Ethylbenzene- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

## Section 12 - Ecological Information

### Toxicity

Toxicity to fish flow-through test LC50 - *Menidia menidia* (Atlantic silverside) - 5.1 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - *Daphnia magna* (Water flea) - 1.8 - 2.4 mg/l - 48 h

Reproduction Test NOEC - *Ceriodaphnia dubia* (water flea) - 0.96 mg/l - 7 d

Toxicity to algae static test EC50 - *Skeletonema costatum* (marine diatom) - 4.9 mg/l - 72 h

### Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 70 - 80 % - Readily biodegradable

### Other adverse effects

Harmful to aquatic life with long lasting effects.

### Section 13 - Disposal Considerations

**Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:** Dispose of as unused product.

### Section 14 - Transport Information

	IMO	RID/ADR	IATA
<b>Shipping Name:</b>	ETHYLBENZENE	ETHYLBENZENE	Ethylbenzene
<b>Hazard Class:</b>	3	3	3
<b>UN Number:</b>	1175	1175	1175
<b>Packing Group:</b>	II	II	II
<b>marine pollutant:</b> No			
<b>other applicable information:</b> Not available.			

### Section 15 - Regulatory Information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006

### Section 16 - Other Information

**Full text of H-Statements referred to under sections 2 and 3.**

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

**MSDS Creation Date:** 05/03/2015

**Revision #1 Date:** 03/05/2016

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*