

## Chemical Safety Data Sheet MSDS / SDS

**ETHYL 2-CYANOACRYLATE**

Revision Date:2024-08-10 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : ETHYL 2-CYANOACRYLATE  
CBnumber : CB9471890  
CAS : 7085-85-0  
EINECS Number : 230-391-5  
Synonyms : Ethyl 2-cyanoacrylate,CYANOACRYLATE ADHESIVE

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.  
Uses advised against : none

**Company Identification**

Company : Chemicalbook  
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing  
Telephone : 400-158-6606

**SECTION 2: Hazards identification****Classification of the substance or mixture**

Skin irritation, Category 2  
Eye irritation, Category 2  
Specific target organ toxicity – single exposure, Category 3

**Label elements****Pictogram(s)**

□

Signal word : Warning

**Hazard statement(s)**

H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation

**Precautionary statement(s)**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Chemical Book

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P337+P313 IF eye irritation persists: Get medical advice/attention.

#### **Prevention**

P264 Wash ... thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

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

P271 Use only outdoors or in a well-ventilated area.

#### **Response**

P302+P352 IF ON SKIN: Wash with plenty of water/...

P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P319 Get medical help if you feel unwell.

#### **Storage**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

#### **Disposal**

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### **Other hazards**

no data available

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## SECTION 3: Composition/information on ingredients

### **Substance**

Product name	: ETHYL 2-CYANOACRYLATE
Synonyms	: Ethyl 2-cyanoacrylate,CYANOACRYLATE ADHESIVE
CAS	: 7085-85-0
EC number	: 230-391-5
MF	: C6H7NO2
MW	: 125.13

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## SECTION 4: First aid measures

### **Description of first aid measures**

#### **If inhaled**

Fresh air, rest. Refer for medical attention.

### Following skin contact

Refer for medical attention .

### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

### Following ingestion

Refer for medical attention .

### Most important symptoms and effects, both acute and delayed

no data available

### Indication of any immediate medical attention and special treatment needed

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature. Obtain medical attention. Esters and related compounds

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## SECTION 5: Firefighting measures

### Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

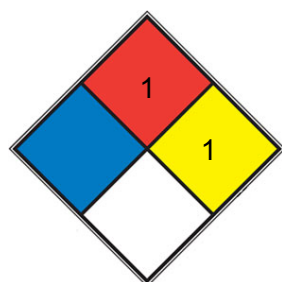
### Specific Hazards Arising from the Chemical

Combustible. Above 75°C explosive vapour/air mixtures may be formed.

### Advice for firefighters

In case of fire in the surroundings, use appropriate extinguishing media. In case of fire: keep drums, etc., cool by spraying with water.

### NFPA 704



■ HEALTH

Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion

■ FIRE 1 can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. [mineral oil](#), ammonia)

■ REACT 1 Normally stable, but can become unstable at elevated temperatures and pressures (e.g. [propene](#))

□ SPEC.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ventilation. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

### Environmental precautions

Ventilation. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

### Methods and materials for containment and cleaning up

Personal precautions: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Environmental precautions: Do not let product enter drains. Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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## SECTION 7: Handling and storage

### Precautions for safe handling

NO open flames. Above 75°C use a closed system, ventilation and explosion-proof electrical equipment. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### Conditions for safe storage, including any incompatibilities

Cool. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 deg C Product is sensitive to light and moisture.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### Occupational Exposure limit values

TLV: 0.2 ppm as TWA; 1 ppm as STEL; (DSEN); (RSEN). MAK: 120 mg/m<sup>3</sup>, 20 ppm; peak limitation category: II(2); skin absorption (H); pregnancy risk group: C

#### Biological limit values

no data available

### Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### Individual protection measures

**Eye/face protection**

Wear safety goggles.

**Skin protection**

Protective gloves. Protective clothing.

**Respiratory protection**

Use ventilation.

**Thermal hazards**

no data available

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## SECTION 9: Physical and chemical properties

**Information on basic physicochemical properties**

Physical state	liquid
Colour	Clear colorless to slightly yellow
Odour	Strong , acrid odor
Melting point/freezing point	-20 to -25 deg C
Boiling point or initial boiling point and boiling range	55 deg C at 3 mm Hg
Flammability	Combustible.
Lower and upper explosion limit/flammability limit	no data available
Flash point	85°C
Auto-ignition temperature	no data available
Decomposition temperature	no data available
pH	no data available
Kinematic viscosity	no data available
Solubility	Acetontrle (Slightly), Benzene (Slightly), Chloroform (Slightly)
Partition coefficient n-octanol/water	no data available
Vapour pressure	0.31 mm Hg at 20 deg C
Density and/or relative density	1.040 at 20 deg C
Relative vapour density	no data available
Particle characteristics	no data available

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## SECTION 10: Stability and reactivity

**Reactivity**

The substance rapidly polymerizes. Decomposes on heating and on burning. This produces toxic and irritating fumes and gases including nitrogen oxides and cyanides.

**Chemical stability**

no data available

### **Possibility of hazardous reactions**

The substance rapidly polymerizes. Decomposes on heating and on burning. This produces toxic and irritating fumes and gases including nitrogen oxides and cyanides.

### **Conditions to avoid**

no data available

### **Incompatible materials**

no data available

### **Hazardous decomposition products**

When heated to decomposition it emits vapors of /Nitrogen oxides/.

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## **SECTION 11: Toxicological information**

### **Acute toxicity**

- Oral: LD50 Rat (male) oral (gavage) 5000 mg/kg
- Inhalation: LC50 Rat (Wistar, male and female) inhalation 21.11 mg/L (1 hr/14days)
- Dermal: no data available

### **Skin corrosion/irritation**

no data available

### **Serious eye damage/irritation**

no data available

### **Respiratory or skin sensitization**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

no data available

### **Reproductive toxicity**

no data available

### **STOT-single exposure**

The substance is severely irritating to the eyes and skin.

### **STOT-repeated exposure**

Repeated or prolonged contact may cause skin sensitization.

## Aspiration hazard

No indication can be given about the rate at which a harmful concentration of this substance in the air is reached on evaporation at 20°C.

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## SECTION 12: Ecological information

### Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

### Persistence and degradability

Ethyl cyanoacrylate polymerizes rapidly on contact with moisture(1,2). Therefore, biodegradation is not a relevant environmental fate process for this substance(SRC).

### Bioaccumulative potential

Ethyl cyanoacrylate polymerizes rapidly on contact with moisture(1,2). Therefore, bioconcentration in aquatic organisms is not a relevant environmental process for this substance(SRC).

### Mobility in soil

Using a structure estimation method based on molecular connectivity indices(1), the Koc of ethyl cyanoacrylate can be estimated to be 6.8(SRC). According to a classification scheme(2), this estimated Koc value suggests that ethyl cyanoacrylate is expected to have very high mobility in soil. However, movement of ethyl cyanoacrylate through soil will be hindered by its rapid polymerization as it comes into contact with moisture or other weakly basic substances(3,4).

### Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Transport hazard class(es)**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Packing group, if applicable**

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

### **Environmental hazards**

ADR/RID: No

IMDG: No

IATA: No

### **Special precautions for user**

no data available

### **Transport in bulk according to IMO instruments**

no data available

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## SECTION 15: Regulatory information

### **Safety, health and environmental regulations specific for the product in question**

#### **European Inventory of Existing Commercial Chemical Substances (EINECS)**

Listed.

#### **EC Inventory**

Listed.

#### **United States Toxic Substances Control Act (TSCA) Inventory**

Listed.

#### **China Catalog of Hazardous chemicals 2015**

Not Listed.

#### **New Zealand Inventory of Chemicals (NZIoC)**

Listed.



**PICCS**

Listed.

**Vietnam National Chemical Inventory**

Listed.

**IECSC**

Listed.

**Korea Existing Chemicals List (KECL)**

Listed.

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## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>

HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pagenID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pagenID=0&request_locale=en)

CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.