

## Material Safety Data Sheet

Issue date: July 15, 2020

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product:** Ethyl Cyanoacrylate Adhesive

**Type:** All grades apply to this MSDS

**Company address:**

Tong Shen Enterprise Co., Ltd.

No.116, Lane 130<sup>th</sup>, Ding-Tso RD., Lin-Yuan, Kaohsiung City, Taiwan

**Region:** TAIWAN

**Contact Information:**

**Telephone:** (886) 7-6420701

**Emergency telephone:** (886) 7-6420701

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**Physical state:** Liquid

**Color:** Clear Colorless

**Odor:** Sharp, Irritating

**HMIS:**

**HEALTH:**

2

**PHYSICAL HAZARD:**

1

**Personal Protection:**

See Section 8

**WARNING:** MAY CAUSE EYE AND RESPIRATORY IRRITATION.  
BONDS SKIN IN SECONDS.

#### Potential Health Effects

**Inhalation:**

Exposure to vapors above the established exposure limit results in respiratory irritation which may lead to difficulty in breathing and tightness in the chest.

**Skin contact:**

Bonds skin in seconds. May cause skin irritation. Allergic reactions are possible. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin.

**Eye contact:**

Irritating to eyes. Causes excessive tearing. Eyelids may bond.

**Ingestion:**

Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It is almost impossible to swallow.

**Existing conditions aggravated by exposure:**

Skin, eye, and respiratory disorders.

**GHS Classification**

Skin irritation (Category 2)

Eye irritation (Category 2A)

Specific target organ toxicity – single exposure (Category 3)

#### GHS Label elements, including precautionary statements:

**Pictogram:**



**Signal word:**

Warning

**Hazard statement(s):**

**H315:**

Causes skin irritation.

**H319:**

Causes serious eye irritation.

**H335:**

May cause respiratory irritation.

**Precautionary statement(s):**

**P261:**

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

**P305+ P351+ P338:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses. If present and easy to do. Continue rinsing.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Hazardous components</b>	<b>%</b>	<b>ACGIHTLV</b>	<b>OSHA PEL</b>	<b>OTHER</b>
Ethyl Cyanoacrylate 7085-85-0	85-100	0.2 ppm TWA	None	None

### **4. FIRST AID MEASURES**

<b>Inhalation:</b>	Remove to fresh air. Prolonged or repeated elevated exposure may cause allergic reactions with asthma-like symptoms in sensitive individuals.
<b>Skin contact:</b>	Do not pull bonded skin apart. Wash with soap and water. Gently peel apart using a dull instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or roll lips apart. Do not pull lips apart with direct opposing force.
<b>Eye contact:</b>	Immediately flush with plenty of water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive damage.
<b>Ingestion:</b>	Peel or roll skin apart. Adhesive becomes solid in contact with saliva and may adhere to inside of mouth. Saliva will lift adhesive in 1-2 days. Avoid swallowing solid adhesive after detachment. Not a toxic product.
<b>Notes to physician:</b>	Surgery is not necessary to separate accidentally bonded tissues. Experience has shown that bonded tissues are best treated by passive, non-surgical first aid. If rapid curing has caused thermal burns they should be treated symptomatically after adhesive is removed.

### **5. FIRE-FIGHTING MEASURES**

<b>Flash point:</b>	≥ 80°C (176°F) Tagliabue closed cup
<b>Flammable/Explosive limits-lower %:</b>	Not determined
<b>Flammable/Explosive limits-upper %:</b>	Not determined
<b>Extinguishing media:</b>	Dry powder. Foam. Water spray. Carbon dioxide.
<b>Special fire fighting procedures:</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
<b>Unusual fire or explosion hazards:</b>	None
<b>Hazardous combustion products:</b>	Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

### **6. ACCIDENTAL RELEASE MEASURES**

<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Clean-up methods:</b>	Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

### **7. HANDLING AND STORAGE**

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Keep container closed when not in use.
<b>Storage:</b>	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Recommended storage temperature: 2-8 °C.

### **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Engineering controls:</b>	Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respiratory use (29 CFR 1910.134).
<b>Skin protection:</b>	Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.
<b>Eye/face protection:</b>	Chemical splash goggles or safety glasses with side shields.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state:</b>	Liquid
<b>Color:</b>	Clear Colorless
<b>Odor:</b>	Sharp, Irritating
<b>Odor Threshold:</b>	1-2 ppm

**Vapor pressure:** Less than 0.2 mm Hg at 25°C (77°F)  
**pH:** Not applicable  
**Boiling point/range:** Greater than 149°C (300°F)  
**Melting point/range:** Not determined  
**Specific gravity:** 1.04 at 20°C  
**Vapor density:** Approximately 3  
**Evaporation rate:** Not available  
**Solubility in water:** Polymerizes in presence of water  
**Partition coefficient (n-octanol/water):** Not determined  
**VOC content:** Less than 2%; 20 g/L (California SCAQMD Method 316B) (estimated)

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions  
**Hazardous polymerization:** Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.  
**Hazardous decomposition products:** None  
**Incompatibility:** Polymerized by water, alcohol, amines, alkaline materials and direct UV.  
**Conditions to avoid:** Avoid temperature above 80°C (176°F), moisture and alkaline.

## 11. TOXICOLOGICAL INFORMATION

**Product toxicity data:** Acute oral LD50 >5000mg/kg (rat)(estimated).  
 Acute dermal LD50 >2000mg/kg (rabbit)(estimated).

### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA
Ethyl Cyanoacrylate 7085-85-0	No	No	No

### Literature Referenced Target Organ & Other Health Effects

Health Effects Hazardous	Health Effects/Target Organs
Ethyl Cyanoacrylate 7085-85-0	Allergen, Irritant, Respiratory

## 12. ECOLOGICAL INFORMATION

Ecological information: Not known

## 13. DISPOSAL CONSIDERATIONS

**Information provided is for unused product only.**  
**Recommended method of disposal:** Dispose of in accordance with Federal, State and local regulations.  
**EPA hazardous waste number:** Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

### U.S. Department of Transportation Ground (49 CFR):

**Proper shipping name:** None  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Exceptions:** None  
**Marine pollutant:** None

### International Air Transportation (ICAO/IATA):

**Proper shipping name:** None  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Exceptions:** None

**Water Transportation (IMO/IMDG):**

Proper shipping name:	Cyanoacrylate ester
Hazard class or division:	None
Identification number:	None
Packing group:	None
Marine pollutant:	None

ICAO/ IATA-DGR: Not regulated as a dangerous good.

**15. REGULATORY INFORMATION**

**United States Regulatory Information**

TSCA 8 (b) Inventory Status:	All ingredients in this mixture are in compliance with TSCA.
TSCA 12 (b) Export Notification:	None.
CERCLA/SARA Section 302 EHS:	None.
CERCLA/SARA Section 311/312:	Immediate Health Hazard, Delayed Health Hazard, Fire, Reactive
CERCLA/SARA 313:	None
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

**Canada Regulatory Information**

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Domestic Substances List.
WHMIS hazard class:	B.3, D.2.B

**European Community**

EEC Label symbol and classification:



"Xi"- Irritant

**16. OTHER INFORMATION**

**DISCLAIMER:**

All the information of Material Safety Data Sheet is provided on the basis in good faith, and is believed to be trustworthy but is for reference only. Adhesion is very complicated and the result of it is much dependent on the surface material, additives, releasing agents of the substrates and user's methods. Tong Shen and its agents, dealers, distributors, directors and employees do not accept any liability for the results whatsoever arising from the use of Tong Shen's products due that the utilization of these products is simply out of Tong Shen's control. The users are responsible for selecting the suitability of the products and methods of use.