# Safety Data Sheet

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

Date of issue: 08/25/2015 Revision date: 08/25/2015 Version: 1.0

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### **Product identifier**

Product name : Mercury M5T

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Surface Insensitive Cyanoacrylate Adhesive - Thin

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

Mercury Adhesives LLC 6150 Parkway North Dr Cumming, GA 30040, USA Phone: (770) 886-9566

Web: www.mercurvadhesives.com

#### **Emergency telephone number**

Emergency number : 1-800-424-9300; CHEMTREC® International Emergency number: 703-527-3887

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Flam. Liq. 4 H227 Skin Irrit. 2 H315

Eye Irrit. 2A H319

STOT SE 3 H335

#### **Label elements**

#### **GHS-US** labelling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

H227 - Combustible liquid Hazard statements (GHS-US)

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P271 - Use only in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/container to local, regional, national, and international regulations.

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Contact through clothing (cotton) may Precautionary phrases cause burns. Keep out of the reach of children.

# Other hazards

This product is not identified as a PBT substance.

WARNING: Cyanoacrylate. Eye irritant. Bonds skin and eyes in seconds. This adhesive gives a virtually immediate, strong bond: apply only to surfaces to be bonded. Do not get adhesive on your skin or other parts of your body, or that of others. In case of body contact, flush with water. Seek medical attention for any eye or internal contact. Keep out of the reach of children.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substances**

Full text of H-phrases: see section 16

#### **Mixture**

#### Hazardous ingredients:

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Name	Product identifier	%	GHS-US classification
ethyl-2-cyanoacrylate	(CAS No) 7085-85-0	> 99	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

# **SECTION 4: First aid measures**

4.1.	Descri	ption of firs	t aid measur	es

First-aid measures general

: If you feel unwell, seek medical advice (show the label where possible). Never give anything by mouth to an unconscious person.

First-aid measures after inhalation

: Overexposure may be irritating to the respiratory system. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advices

First-aid measures after skin contact

Do not pull bonded skin apart. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Do not remove clothing if it sticks to the skin. Contact through clothing can cause immediate polymerization, exothermic reaction and burning. Removal of clothing can remove bonded skin. Submerge with water and soak affected area. Wear a plastic (not cotton) apron for added protection. Get immediate medical advice/attention. If the lips are accidentally bonded, apply warm soapy water, encourage maximum wetting and pressure from saliva inside the mouth and peel or roll lips apart. DO NOT TRY TO PULL LIPS APART. Burn: should be treated normally after the lump of cyanoacrylate is released from the

First-aid measures after eye contact

Immediately flush with warm water for at least 15 minutes, get prompt medical attention and apply gauze patch. Cyanoacrylate will bond to eye protein and cause a lachrymatory effect which will help de-bond the adhesive. Keep eye covered until de-bonding is complete (usually with 1-4 days). Get immediate medical attention.

First-aid measures after ingestion

This route is not likely. Material will rapidly polymerise in the mouth prior to ingestion. Ensure breathing passages are not obstructed. Get immediate medical attention.

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

Symptoms/injuries

: Irritation of the eye tissue. Causes skin and eye irritation. Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation

: May cause drowsiness or dizziness. May cause respiratory irritation.

Symptoms/injuries after skin contact

: May cause irritation to skin. Cyanoacrylate bonds skin and eyes in seconds. In the case of large spills on the skin, superficial burns may occur. Contact through clothing can cause immediate polymerization, exothermic and burning.

Symptoms/injuries after eye contact

: Causes eye irritation. Bonds eyes in seconds. Goggles or safety glasses are recommended.

Symptoms/injuries after ingestion

: Ingestion unlikely. Material will rapidly polymerise in the mouth prior to ingestion.

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

If exposed or concerned, get medical advice and attention.

#### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam. Dry powder. Carbon dioxide. Water spray or fog.

Unsuitable extinguishing media

: Solid water jet ineffective as extinguishing medium. Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard

Reactivity

: Combustible liquid.

Explosion hazard

: In combustion emits toxic fumes of carbon dioxide, carbon monoxide and nitrogen oxides.

: No dangerous reactions known under normal conditions of use.

## 5.3. Advice for firefighters

Firefighting instructions

: Exercise caution when fighting any chemical fire. Use a water spray to cool exposed surfaces and to protect fire-fighters. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Avoid (reject) fire-fighting water to enter environment.

Protection during firefighting

: Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Do not allow run-off from fire fighting to enter drains or water courses.

#### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Evacuate the area immediately. Ensure adequate ventilation. Avoid all contact with skin, eyes, or clothing. Handle in accordance with good industrial hygiene and safety practice.

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#### 6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protection equipment (PPE).

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Evacuate unnecessary personnel. Use appropriate personal protection equipment (PPE).

Ventilate area.

#### 6.2. Environmental precautions

Do not allow water (or moist air) contact with this material. Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment

Absorb excess liquid spillage on inorganic adsorbent material such as fine sand, brick dust etc.
 Place spent adsorbent in sealed packages and contact specialist waste disposal contractor.
 Collect spillage.

Methods for cleaning up

: Clear up spills immediately and dispose of waste safely. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite. Use only non-sparking tools. Notify experts. Collect spillage. Or flood with water slowly to complete polymerization (~10:1, adhesive: water). Scrape off floor. Cured material can be disposed of as non-hazardous waste.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact of substance with water. Do no eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood. Observe very strict hygiene - avoid contact. Use only in a well-ventilated area. Use personal protective equipment as required. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

Do not eat, drink or smoke in areas where product is used. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

# 7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Comply with applicable regulations.

Storage conditions

Keep away from direct sunlight. Keep container tightly closed. Keep cool. Keep in fireproof place.

Store in a dry place. Keep container closed when not in use.

Incompatible products : Amines. Oxidizing agents. Alkali metals. Water. Alcohols. Strong bases. Strong acids. Incompatible products : Sources of ignition. Direct sunlight.

Storage temperature : Refrigerated storage (2°C to 8°C) is recommended for optimum shelf life.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

ethyl-2-cyanoacrylate (7085-85-0)		
USA ACGIH	ACGIH TWA (ppm)	0.2 ppm
USA ACGIH	ACGIH STEL (ppm)	0.2 ppm

#### 8.2. Exposure controls

Appropriate engineering controls

: Ensure all national/local regulations are observed. Avoid all unnecessary exposure.

Personal protective equipment

: Protective clothing. Protective goggles. Gloves. Full protective flameproof clothing. Respiratory

protection of the dependent type. Avoid all unnecessary exposure.

Materials for protective clothing

: Keep suitable chemically resistant protective clothing readily available for emergency use.

Hand protection

: Wear chemically resistant protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. Wear appropriate mask.

Other information

: Do not eat, drink or smoke during use.

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#### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Colorless liquid.

Colour : Colourless.

Odour : Irritating. sharp.

Boiling point : > 300 °F

Flash point : > 176 °F

Self ignition temperature : > 450 °C

Specific gravity : 1.06

Solubility : Reacts with water. Soluble in Acetone.

Viscosity, kinematic : 5 cPs
Evaporation rate : Negligible

VOC: <2%, <20g/L; California SCAQMD method 316

(estimated)

: <= 0.5 mmHg @75°F

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Vapour pressure

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions. Polymerises rapidly with water.

#### 10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal conditions. Polymerization may occur on exposure to conditions or materials listed below. Polymerization can be rapid.

#### 10.4. Conditions to avoid

Direct sunlight. Heat, high temperature. Moisture, humidity.

# 10.5. Incompatible materials

Amines. Water. Alkalis. Oxidizing agent. Alcohols.

#### 10.6. Hazardous decomposition products

Toxic fume. Carbon monoxide. Carbon dioxide. Nitrogen oxides.

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

ethyl-2-cyanoacrylate (7085-85-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Experimental value, Rabbit; Experimental value)

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : Negligible ecotoxicity.

# 12.2. Persistence and degradability

Mercury M5T	
Persistence and degradability	No data available.
ethyl-2-cyanoacrylate (7085-85-0)	
Persistence and degradability	No data available.

#### 12.3. Bioaccumulative potential

Mercury M5T	
Bioaccumulative potential No bioaccumulative potential	
ethyl-2-cyanoacrylate (7085-85-0)	
Bioaccumulative potential	No bioaccumulation potential

#### 12.4. Mobility in soil

Considered very low due to rapid polymerization with water.

#### 12.5. Other adverse effects

Other information	: Negligible ecotoxicity.

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# **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Waste treatment methods : Remove waste in accordance with local and/or national regulations.

Sewage disposal recommendations : Do not discharge into drains or the environment.

Waste disposal recommendations : Transfer to a suitable container and arrange for collection by specialized disposal company. Or

polymerize adhesive slowly with water (~10:1, adhesive : water). Hardened product can be disposed of as non-hazardous waste by licensed contractors. Dispose in a safe manner in

accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

In accordance with DOT

Transport document description : NA1993 Combustible liquid, n.o.s., 9, III

UN-No.(DOT) : UN3334 DOT NA no. : NA1993

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

Department of Transportation (DOT) Hazard

Classes

: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

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

requiring a technical name

Packing group (DOT) : III - Minor Danger

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

(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)

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) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Marine pollutant : No

**Additional information** 

Other information : No supplementary information available.

ADR

Transport document description : UN UN3334 aviation regulated liquid, n.o.s., 9

Class (ADR) : 9 - Miscellaneous dangerous substances and articles

Transport by sea

Proper Shipping Name (IMDG) : Not regulated

Air transport

UN-No.(IATA) : UN3334

Proper Shipping Name (IATA) : aviation regulated liquid, n.o.s.

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

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#### ethyl-2-cyanoacrylate (7085-85-0)

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

#### 15.2. International regulations

#### **CANADA**

Mercury M5T	
WHMIS Classification	Hazard Class B.3, D.2B

#### **EU-Regulations**

EUH202: Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315 Eye Irrit. 2A H319 STOT SE 3 H335

#### 15.2.2. National regulations

No additional information available

#### 15.3. US State regulations

Proposition 65 No Significant Risk Levels (NSRLs): This product contains no ingredient under Proposition 65 that is classified as a significant risk.

#### ethyl-2-cyanoacrylate (7085-85-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

#### **SECTION 16: Other information**

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE
	COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and
	mixturais, amanding and rangeling Directives 67/549/550 and 1000/45/50, and amanding

mixturejs, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H-phrases:

H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

WARNING: Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Contact through clothing (cotton) may

cause burns. Keep out of the reach of children.

#### **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard
Physical : 1 Slight Hazard

#### SDS US (GHS HazCom 2012)

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Information presented herein has been compiled from sources considered to be accurate and reliable, but is not guaranteed to be so. Nothing herein shall be considered as recommending practices or products in violation of any patent, law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. WE MAKE NO WARRANTIES REGARDING THE PRODUCTS AND DISCLAIM ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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