



Material Safety Data Sheet

E

1. Chemical Product and Company Identification

DESCRIPTION: KRAZY GLUE ADVANCED FORMULA
 PRODUCT TYPE: CYANOACRYLATE ADHESIVE
 APPLICATION: KG-483, 10300

Manufacturer/Supplier Information

MSDS Prepared by:
 Elmer's Products, Inc.
 1000 Kingsmill Parkway
 Columbus, OH 43229
 For additional health, safety or regulatory information, call 614-225-7695.
 Call 1-800-848-9400 to place an order or request additional MSDSs.

Emergency Phone Number
 Poison Control Center
 1-800-228-5635 ext 22

2. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

7085-85-0 Ethyl 2-Cyanoacrylate	% by weight >70
---------------------------------	--------------------

3. Hazards Identification

3.1 Emergency Overview

Appearance	Colorless liquid
Odor	Irritating
CAUTION!	
COMBUSTIBLE	
May become unstable at high temperatures or may react with water.	
May be harmful if inhaled. May cause irritation of nose, throat and lungs.	

Bonds skin instantly. Causes skin irritation.
Bonds eyelids instantly. Causes eye irritation.

HMIS Rating

HEALTH = 2 (moderate)
FLAMMABILITY = 2 (moderate)
REACTIVITY = 1 (slight)

3.2 Potential Health Effects

Immediate Hazards

INGESTION: No hazards known to company.
INHALATION: May be harmful if inhaled. Liquid or vapor may cause irritation of nose, throat and lungs.
SKIN: Bonds skin instantly. Causes irritation.
EYES: Bonds eyelids instantly. Causes irritation.

Delayed Hazards

None of the components present in this product at concentrations equal to or greater than 0.1% have been listed by NTP, classified by IARC, nor regulated by OSHA as a carcinogen.

4. First Aid Measures

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.
INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.
SKIN: If skin bonding occurs, soak in nail polish remover or acetone and carefully peel or roll skin apart (do not pull).
EYES: If eye contact occurs, hold eyelid open and rinse thoroughly but gently with only water for 15 minutes and GET MEDICAL ATTENTION. Do not use any solvents to flush the eye and its surroundings. Liquid glue will sting eye temporarily. Solidified glue may irritate eye like a grain of sand and should be treated by an eye doctor.

5. Fire Fighting Measures

Autoignition Temperature

485 deg C

Upper/Lower Flammable Limits Not available
Up/Lower Explosive Limits, % by Vol Not available
Flash Point 83 deg C (CC)
COMBUSTIBLE.

Keep away from heat and flame.

In case of fire, use water spray, dry chemical, foam or CO2. Use water to keep fire-exposed containers cool.

6. Accidental Release Measures

Eliminate all ignition sources. Soak up with absorbent material and remove to a chemical disposal area. Prevent entry into natural bodies of water.

7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.

Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).

INHALATION: Avoid breathing vapor. Use with adequate ventilation.

SKIN: Avoid contact with skin and clothing.

EYES: Avoid contact with eyes.

7.2 Storage

Keep away from amines.

Store in cool, dry area away from sun and heat.

Keep containers tightly closed.

Exposure to small amounts of moisture, even moisture in air, causes polymerization and renders the product unusable.

Keep away from heat, sparks, flame and other ignition sources.

8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We,

therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate. If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Ethyl 2-Cyanoacrylate 7085-85-0
 ACGIH TLV: 0.2 ppm (1 mg/m³) TWA
 OSHA PEL: NONE ESTABLISHED

9. Physical and Chemical Properties

Percent Volatiles	Not determined
pH @ 25 C	Not available
Specific Gravity	1.05
Appearance	Colorless liquid
Autoignition Temperature	485 deg C
Boiling Point	62 deg C (5 mm Hg)
Vapor Density (Air=1)	> 1
Vapor Pressure, mm Hg @ 20 C	0.13 (@ 20 deg C)
Evaporation Rate (Butyl Acetate=1)	< 1
Upper/Lower Flammable Limits	Not available
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	83 deg C (CC)
Freezing Point	< -20 deg C
Odor	Irritating
Odor Threshold, ppm	Not available
Solubility in Water	Negligible
Coefficient of Water/Oil Distrib.	Not applicable

10. Stability and Reactivity

Normally stable, but may become unstable at high temperatures or may react with water.

Conditions to Avoid:

Exposure to heat, flame and incompatibles.

- **Incompatibilities:**

Water, alcohols, amines, bases and direct UV.

- **Decomposition products may include:**

Oxides of carbon.

- **Hazardous polymerization:**

Will not occur.

- **Other Hazards:**

None known to company.

11. Toxicological Information

See Section 3 Hazards Identification information.

Ethyl 2-Cyanoacrylate 7085-85-0

LC50: Not available

LD50: Not available

12. Ecological Information

Not determined.

13. Disposal Considerations

Recover free liquid. Absorb residue and dispose of according to local, state/provincial, and federal requirements.

Empty container: May contain explosive vapors. DO NOT cut, puncture or weld on or nearby.

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the

appropriate regulations to properly classify your shipment for transportation.
Non-Regulated.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Non-Regulated.

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

OSHA Hazard Communication Standard 29CFR1910.1200

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

SARA Title III: Section 311/312

Fire hazard
Immediate health hazard

SARA Title III Section 313 and 40 CFR Part 372

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.
None required per SARA TITLE III SECTION 313.

TSCA Section 8(b) Inventory

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

Workplace Hazardous Materials Information System (WHMIS)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 2B

CLASS B, DIV 3

Canadian Environmental Protection Act (CEPA)

This product contains one or more chemical substances on the Non-Domestic Substances List (NDSL).

National Pollutant Release Inventory (NPRI)

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory. None required.

16. Other Information

CL (Cautionary Labeling): Products bearing the CL (Cautionary Labeling) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the chronic hazard labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

User's Responsibility

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

Disclaimer

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

CUR ISSUE 29-MAR-03
PREVIOUS ISSUE: 29-FEB-00