

Material Safety Data Sheet

FOR INDUSTRIAL USE ONLY

1. Chemical Product and Company Identification

DESCRIPTION: ARON ALPHA TYPE 221 PRODUCT TYPE: CYANOACRYLATE ADHESIVE APPLICATION: AA-471, AA-503, AA-571, AA-592

Manufacturer/Supplier Information

MSDS Prepared by: Elmer's Products, Inc. Emergency Phone Number 1000 Kingsmill Parkway Poison Control Center Columbus, OH 43229 1-800-228-5635 ext 22 For additional health, safety or regulatory information, call 614-225-7695. Call 1-800-848-9400 to place an order or request additional MSDSs.

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

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

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HEALTH = 2 (moderate)
FLAMMABILITY = 2 (moderate)
REACTIVITY = 1 (slight)
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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 Temperature485 deg CUpper/Lower Flammable LimitsNot availableUp/Lower Explosive Limits, % by Vol Not availableFlash Point83 deg C (CC)COMBUSTIBLE.Keep away from heat and flame.In case of fire, use water spray, dry chemical, foam or CO2.

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

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 |
|-------------------------------------|-------------------|
| рН @ 25 С | Not available |
| Specific Gravity | 1.05 |
| Appearance | Colorless liquid |
| Autoignition Temperature | 485 deg C |
| Boiling Point | 62 deg C (5mm Hg) |
| Vapor Density (Air=1) | > 1 |
| Vapor Pressure, mm Hg @ 20 C | 0.13 |
| 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

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See Section 3 Hazards Identification information.
Ethyl 2-Cyanoacrylate 7085-85-0
LC50: Not available
LD50: Not available
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12. Ecological Information

Not determined.

13. Disposal Considerations

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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.
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14. Transport Information

14.1 U.S. Department of Transportation (DOT)

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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.
Combustible.
(Containers less than 110 gallons non-regulated)
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14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

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



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CLASS D, DIV 2B
CLASS B, DIV 3
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Canadian Environmental Protection Act (CEPA)

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

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

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

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