1. Product and Company Identification

Product Identifier: Turbo Fuse 170
Product Type: Cyanoacrylate Adhesive
Recommender Use: Industrial and Consumer Use of Adhesives

Company Name: Palm Labs Adhesives
Company Address: 3063 Enterprise Road, DeBary FL 32713
Company Contact: Toll Free: (855) PLA-GLUE || Phone: (321) 710-4850 || Email: Sales@PalmLabsAdhesives.com
Emergency Phone: (386) 490-9983

2. Hazards Identification

Pictogram: !
Signal Word: Warning

Hazard Classification:
- Flammable Liquid – Category 4
- Skin Irritation – Category 2
- Eye Irritation – Category 2A
- Single Target Organ Toxicity Single Exposure – Category 3

Hazard Statements:
- H227: Combustible liquid.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

Precautionary Statements:
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271: Use only in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P302+352: IF ON SKIN: Wash with plenty of soap and water.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists, get medical attention.
- P501: Dispose of contents/container to local, regional, national, and international regulations.

Other:

3. Composition / Ingredients Information

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS Number</th>
<th>Percentage*</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl-2-cyanoacrylate</td>
<td>7085-85-0</td>
<td>80 – 100</td>
<td>H227, H315, H319, H335</td>
</tr>
</tbody>
</table>

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. First Aid Measures

General: If you feel unwell, seek medical attention.

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 attention.

Skin Contact: Do not pull bonded skin apart. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Do not remove clothing if it sticks to skin. Contact through clothing (cotton) 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 apron for added protection. If lips are accidentally bonded, apply warm soapy water and peel or roll lips apart. Do not try to pull apart! Burn: Should be treated normally after cyanoacrylate is released from the tissue.

Eye Contact: Immediately flush with warm water for at least 15 minutes, and seek medical attention. Cyanoacrylate will bond to eye proteins and cause weeping which will help debond the adhesive. Keep eye covered until debonding is complete, usually within 5 days.

Ingestion: Ingestion is not likely. Material will rapidly polymerize in the mouth prior to ingestion. Ensure breathing passages are not obstructed and seek medical attention.
5. Fire Fighting Measures

Extinguishing Media: Alcohol-resistant foams, dry powder, carbon dioxide, water spray or fog.

Unsuitable Media: Water jet.

Special Hazards: Trace amounts of toxic fumes may be released on combustion. Hazardous fumes of carbon dioxide, carbon monoxide, and nitrogen oxides.

Firefighting Instructions: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and suitable protective clothing.

6. Accidental Release Measures

Emergency Procedures: Evacuate area immediately. Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Handle in accordance with good industrial hygiene and safety practices.

Environment Precautions: Avoid release to the environment. Prevent entry to sewers and public waters.

Clean-up Methods: Clear up spills immediately and dispose of waste safely. 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

Handling: Avoid breathing vapors. Use only outdoors or in a well ventilated area. Use personal protective equipment as required. Use of dispensing equipment is recommended to minimize the risk of skin or eye contact. Wash hands and other exposed areas after use.

Storage: Comply with applicable local, state, and federal regulations. Keep away from direct sunlight. Keep container tightly closed when not in use. Store in a cool, dry place. Refrigerated storage is recommended for optimum shelf life.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>AIHA WEEL</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl-2-cyanoacrylate</td>
<td>N/A</td>
<td>0.2 ppm TWA</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Engineering Controls: Ensure all local, state, and federal regulations are observed. Avoid unnecessary contact or exposure to material.

Respiratory Protection: Provide adequate ventilation in area of use. Do not use this product in an enclosed or poorly ventilated area. If ventilation alone cannot control exposure, respiratory protection should be used.

Eye/Face Protection: Wear protective goggles or face shield.

Skin Protection: Wear chemically resistant protective clothing.

9. Physical and Chemical Properties

Physical State: Liquid
Color: Colorless
Odor: Irritating, sharp
Odor Threshold: Not determined
pH: Not determined
Vapor Pressure: < 0.5 mmHg (@ 23.8 °C (75 °F)
Vapor Density: Not determined
Melting Point/Range: -31 °C (-23.8 °F)
Boiling Point/Range: 214 °C (417 °F)
Flash Point: 82.5 °C (180.5 °F)
Explosive Lower Limits: Not determined
Explosive Upper Limits: Not determined
Autoignition Temperature: 480 °C (896 °F)
Evaporation Rate: Not determined
Decomposition Temperature: Not determined
Specific Gravity: 1.043 g/cm³ (8.67 lb/gal)
Solubility in Water: Polymerizes in the presence of water.
Partition Coefficient: Not determined
Volatile Organic Compounds: < 2% / < 20 g/l (California SCAQMD Method 316B)
10. Stability and Reactivity

Stability: Stable under normal conditions.
Reactivity: No dangerous reactions known under normal conditions.
Hazardous Reactions: Rapid polymerization will occur in the presence of moisture or other basic materials.
Hazardous Decomposition: Toxic fumes. Carbon monoxide, carbon dioxide, nitrogen oxides.
Incompatible Materials: Amines, water, alkalis, oxidizing agents, and alcohols.
Conditions to Avoid: Direct sunlight, moisture, humidity, and basic materials.

11. Toxicological Information

Ethyl-2-cyanoacrylate (7085-85-0)

| LD50 Oral (Rat) | >5000 mg/kg |
| LD50 Dermal (Rabbit) | >2000 mg/kg |

Acute Toxicity: In dry atmosphere with < 50% humidity, vapors may irritate the eyes and respiratory system. Prolonged exposure to high concentrations of vapors may lead to chronic effects in sensitive individuals.
Skin: Causes skin irritation.
Eye: Vapors irritating to eyes. Vapors may cause lachrymatory effect.
Respiratory: Vapors irritating to respiratory system.
Germ Cell Mutagenicity: Not classified as a germ cell mutagen.
Carcinogenicity: Not carcinogenic.

12. Ecological Information

Toxicity: Negligible ecotoxicity.
Persistence / Degradability: Readily biodegradable in water.
Bioaccumulative Potential: Low potential for bioaccumulation.
Mobility in Soil: Not applicable. Test compounds will polymerize when in contact with moisture in soil.
Other Adverse Effects: Not determined.

13. Disposal Considerations

Product Disposal: Dispose of waste in accordance with local and national regulations. Do not discharge into drains or the environment.
Cured adhesive can be disposed of as non-hazardous waste in an authorized landfill or incinerated under controlled conditions.
Uncleaned Packages – After use, tubes, cartons, and bottles containing unused product should be disposed of as chemically contaminated waste in an authorized legal landfill site or incinerated.

14. Transport Information

Ground Transport (49 CFR)
ID Number: NA 1993
Proper Shipping Name: Combustible liquid, n.o.s. (Cyanoacrylate esters)
Hazard Class: Combustible liquid
Packing Group: III
Exceptions: Non-bulk packaging containing less than 450 L is unregulated for domestic ground transport and may be shipped without restriction. [49 CFR 173.150(f)]

Sea Transport (IMO / IMDG)
ID Number: Not regulated
Proper Shipping Name: Not regulated
Hazard Class: Not regulated
Packing Group: Not regulated
Environmental Hazards: No

Air Transport (ICAO / IATA)
UN Number: UN 3334
Proper Shipping Name: Aviation regulated liquid, n.o.s. (Cyanoacrylate esters)
Hazard Class: 9
Packing Group: III
Exceptions: Inner packaging containing less than 500mL do not exhibit the properties of aviation regulated liquids and may be shipped without restriction.
15. Regulatory Information

**Ethyl-2-cyanoacrylate (7085-85-0)**

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

Listed on: the New Jersey – Right to Know Hazardous Substance List.

This product contains no ingredient under Proposition 65 that is classified as a significant risk.

Classification of the product according to CLP Regulation (EC) No 1272/2008

Skin Irritation – 2
Eye Irritation – 2
Specific Target Organ Toxicity, Single Exposure – 3

16. Other Information

<table>
<thead>
<tr>
<th>NFPA Hazard Diamond</th>
<th>HMIS Color Bar</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="NFPA Hazard Diamond" /></td>
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</table>

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

The above information describes exclusively the safety requirements of this product and any information present herein has been compiled from sources considered to be accurate and reliable, but is not guaranteed to be so. The information is intended to give you advice about the safe handling of the product named in this Safety Data Sheet (SDS) for storage, processing, transport, and disposal. The information cannot be transferred to other products. In the case of mixing this product with any other substance or in the case of processing, the information on this safety data sheet is not necessarily valid for the resulting material. 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.