

**Section 1 Identification**

**Product identifiers**

Product names: F-Bond Rotary THICK

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Cyanoacrylate adhesive

**Details of the supplier of the safety data sheet**

Freeman Manufacturing and Supply Company  
1101 Moore Road, Avon, OH 44011  
Phone (440) 934-1902  
FAX (440) 934-7200

**Emergency telephone number**

CHEMTREC 24 hour: (800) 424-9300

HMIS	
H	1
F	2
R	1

**Section 2 Hazards Identification**

**GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)**

Flammable Liquid, Category 4  
Eye Irritation, Category 2A  
Skin Irritation, Category 2  
Specific Target Organ Toxicity, Single Exposure, Category 3 (Respiratory)

**GHS Label elements, including precautionary statements**



Signal word

Warning

**Hazard statements**

Combustible liquid  
Causes serious eye irritation.  
Causes skin irritation.  
May cause respiratory irritation.

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves / eye protection / face protection.  
Wash thoroughly after handling.  
IF ON SKIN: Wash with plenty of water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
Dispose of contents/container to local, regional, national, and international regulations.

**Hazards not otherwise classified (HNOC) or not covered by GHS**

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

**Section 3 Composition/Information on Ingredients**

Hazardous Components	CAS Number	Percent (%)
Ethyl-2-cyanoacrylate	7085-85-0	80-100

**Section 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.

**Section 5 Fire-Fighting Measures**

- Suitable extinguishing media**  
Alcohol-resistant foams, dry powder, carbon dioxide, water spray or fog
- Unsuitable extinguishing media**  
Water spray jet
- Hazardous combustion products**  
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.

**Section 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.

**Section 7 Handling and Storage**

**Precautions for safe 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.

**Conditions for safe storage, including any incompatibilities**

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.

**Section 8 Exposure Controls/Personal Protection**

**Control parameters**

**Components with workplace control parameters**

Component	CAS Number	Value type	Control parameter / Permissible concentration	Basis
Ethyl-2-cyanoacrylate	7085-85-0	TWA	0.2 ppm	ACGIH
		STEL	1 ppm	ACGIH

**Exposure controls**

**Appropriate engineering controls**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below the recommended exposure limits. Do not use this product in an enclosed or poorly ventilated area. If ventilation alone cannot control exposure, respiratory protection should be used.

**Personal protective equipment**

**Eye/face protection**

Wear protective goggles or face shield.

**Skin protection**

**Hand Protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Material of gloves: neoprene, nitrile rubber, butyl-rubber

**Body Protection**

Prevent skin contact when handling material.

**Respiratory Protection**

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

**Safety Stations**

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**General Hygienic Practices**

Avoid breathing vapor or mist. Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing promptly and clean thoroughly before reuse.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Colorless liquid
<b>Odor</b>	Characteristic, irritating, sharp
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point</b>	-31 °C (-23.8 °F)
<b>Boiling point</b>	214 °C (417 °F)
<b>Flash Point</b>	82.5 °C (180.5 °F)
<b>Evaporation rate</b>	No data available
<b>Upper/lower flammability</b>	No data available
<b>Vapor pressure</b>	< 0.5 mmHg (@ 23.8 °C) (75 °F)
<b>Vapor density</b>	No data available
<b>Specific gravity</b>	1.043 g/cm <sup>3</sup> (8.67 lb/gal)
<b>Water Solubility</b>	Polymerizes in the presence of water.
<b>Coefficient: n-octanol/ water</b>	No data available
<b>Auto-ignition temperature</b>	480 °C (896 °F)
<b>Viscosity</b>	No data available
<b>Volatile Organic Compounds</b>	< 2% / < 20 g/l (California SCAQMD Method 316B)

**Section 10 Stability and Reactivity**

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

**Section 11 Toxicological Information**

**Acute oral toxicity (Ethyl-2-cyanoacrylate):** >5000 mg/kg LD50 (Rat)  
**Acute dermal toxicity (Ethyl-2-cyanoacrylate):** >2000 mg/kg LD50 (Rabbit)  
**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.

**Section 12 Ecological Information**

<b>Toxicity</b>	Negligible toxicity
<b>Persistence and degradability</b>	Readily biodegradable in water
<b>Bioaccumulative potential</b>	Low potential for bioaccumulation
<b>Mobility in soil</b>	Not applicable. Test compounds will polymerize when in contact with moisture in soil.
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

Dispose of waste in accordance with local and national regulations. Do not discharge in to 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 land fill site or incinerated.

**Section 14 Transport Information**

**DOT**

**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)]



**IMDG**

**ID Number:** Not regulated  
**Proper Shipping Name:** Not regulated  
**Hazard Class:** Not regulated  
**Packing Group:** Not regulated  
**Environmental Hazards:** No

**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.



**Section 15 Regulatory Information**

**US Federal Regulations**

SARA 311/312 Hazards: See Section 2 Hazard Statements  
 SARA 313 Toxic Chemical: None listed

**US State Regulations**

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.

**Inventories**

TSCA: All ingredients listed as active on the TSCA inventory

**Section 16 Other Information**

**Disclaimer**

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.