Material Safety Data Sheet **Apollo 2240-10**

1- Chemical Product and Company Identification:
Product Name: **Apollo 2240-10** Product Type: Cyanoacrylate Ester
Date revised: 02/28/03

2- Composition/Information on Ingredients:
Hazardous Component CAS Number %
Ethyl-2 Cyanoacrylate 7085-85-0 90-95
Poly Methyl Methacrylate 9011-14-7 5-10
Urethane Rubber Trade Secret 5-10
Exposure Limits (TWA) ACGIH (TLV) OSHA (PEL) OTHER
Ethyl-2 Cyanoacrylate 0.2 ppm None None
Exposure Limits (STEL)

3- Hazards Identification:
Toxicity: Skin contact may cause burns. Bonds rapidly and strongly to skin.
Skin and eye irritant. Estimated oral LD50 more than 5000mg/kg.
Primary routes of Entry: Inhalation
Signs of exposure: Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and / or repeated overexposure to vapors may produce symptoms of non-allergic asthma in sensitive individuals.

4- First Aid Measures:
Ingestion: Ingestion is unlikely. See supplemental section for emergency action.
Inhalation: Remove to fresh air. If symptoms persist, obtain medical attention.
Skin contact: Soak in warm water. See supplemental section for emergency action.
Eye contact: Flush with warm water. See supplemental section for emergency action.

5- Fire Fighting Measures:
Flash Point: 150-200F, Tag Closed Cup
Extinguishing Media: Foam, Dry Chemical or Carbon Dioxide
Unusual Fire or Explosion Hazards: Vapors exceeding the flash point will ignite when exposed to flame.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus.

6-Accidental Release Measures
Steps to be taken in case of spill or leak: Flood with water to polymerize. Soak up with inert absorbent.

7- Handling and Storage:
Safe storage: Store away from heat and direct sunlight to maximize shelf life. Store inside in a dry location.
Handling: Keep container tightly closed. Avoid contact with skin. Avoid breathing vapors.

8- Protective Equipment:
Ventilation: Local exhaust ventilation is recommended to maintain vapor level below TLV.
Respiratory protection: Not applicable with good local exhaust.
Skin: Polyethylene or non-reactive gloves. Do not use cotton or wool. See supplemental page for more information.
Eye protection: Safety glasses or goggles with side shields.

9- Physical and Chemical Properties:
Appearance: Clear liquid

Odor: Sharp, pungent
Boiling Point: Greater than 300F
Vapor Pressure: Less than .2mmHg @20C
Vapor Density: Approximately 3 (Air =1)
Evaporation rate: Not applicable
Specific Gravity: 1.06
Solubility in water: Negligible. Polymerized by water.

10- Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Incompatibility: Polymerized by contact with water, alcohols, amines, and alkalis.

11- Toxicological Information

See Section 3

12-Ecological Information

No Data

13- Disposal Considerations:

Spill or accidental release: Flood with water to cure (harden) adhesive. Soak up with an inert absorbent.
Disposal procedures: Incinerate or dispose of in an approved landfill in accordance with local and EPA regulations. Not a RCRA hazardous waste.

14- Transportation Information:

Domestic Ground Transport:
Proper shipping name: Unrestricted (not more than 450 liters)
Combustible liquid, n.o.s. (more than 450 liters)
Hazard class or division: Unrestricted (Not more than 450 liters)
Combustible liquid (more than 450 liters)
Identification number: None (Not more than 450 liters)
NA 1993 (More than 450 liters
Marine pollutant: No

15- Regulatory Information

CA Proposition 65: No information

16- Other Information

Hazard NFPA Hazard Code® HMIS Hazard Code®
Health 2 2
Fire 2 2
Reactivity 1 1
Specific Hazard No water Personal protection: See Section 8
NFPA is a registered trademark of the National Fire Protection Association
HMIS is a registered trademark of the National Paint and Coatings Association

First Aid Supplement

Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds human tissue and skin in seconds. Experience has shown that accidents due to

Cyanoacrylates are best handled by passive, non-surgical first aid. Treatment of specific types of accidents are suggested as follows:

Skin Contact- Remove excess adhesive. Soak in warm, soapy water. The adhesive will come loose from the skin in several hours. Dried adhesive does not present a health hazard even when bonded to the skin. Avoid contact with clothes, fabric, rags or tissue. Contact with these materials may cause polymerization. The polymerization of large amounts of adhesive will generate heat causing smoke, skin burns, and strong, irritating vapors. Wear rubber or polyethylene gloves and an apron when handling large amounts of adhesive.

Skin Adhesion- First immerse the bonded surfaces in warm, soapy water. Peel off or roll the surfaces open with the end of a blunt edge, such as a spatula or a spoon handle, then remove adhesive from the skin with soap and water. Do not try to pull the surfaces apart with a direct opposing action.

Eyelid Adhesion- In the event that eyelids are stuck together or bonded to the eyeball, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in one to two days. There will be no residual damage. Do not try to open the eyes by manipulation.

Adhesive in eye- Adhesive introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods, usually in several hours. This will cause periods of weeping until clearance is achieved. It is important to understand that disassociation will normally occur within a matter of hours, even with gross contamination.

Mouth- If lips are accidentally stuck together apply lots of warm water and encourage maximum wetting and pressure from saliva inside the mouth. Peal or roll lips apart. Do not try to pull the lips with direct opposing action. It is almost impossible to swallow Cyanoacrylate. The adhesive solidifies and adheres in the mouth. Saliva will lift the adhesive in one to two days.

Burns- Cyanoacrylates give off heat on solidification. In rare cases, large drops will increase in temperature enough to cause a burn. Burns should be treated normally after the lump of Cyanoacrylate is released from the tissue as described above.

Surgery- It should never be necessary to use such drastic action to separate accidentally bonded skin.

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