

MSDS Document

Product Dynatex® 405-1 Clear Metal Adhesive

1. Chemical Product and Company Identification

Trade Name of this Product Dynatex® 405-1 Clear Metal Adhesive

MSDS ID DYN405-1

Manufacturer

Dynatex Inc.
350 Ring Road
Elizabethtown, KY 42701

Phone Number

(270) 769-3385

Emergency Phone

CHEMTREC (800) 424-9300

Revision Date 3/27/2007



Health:	2
Fire:	2
Reactivity:	1
Specific	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Methyl Cyanoacrylate Ester	Trade Secret	50% - 60%			
Ethyl-2-Cyanoacrylate	7085-85-0	20% - 30%	0.2 ppm	None	
Poly Methyl Methacrylate	9011-14-7	10% - 20%			

3. Hazard Identification

Eye Contact

Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Skin Contact

Bonds to skin in seconds. May cause skin irritation. Cyanoacrylates have been reported to cause allergic reaction due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat during the cure process and, in rare instances, a large drop can burn the skin.

Inhalation

Exposure to vapors above the established exposure limit results in respiratory irritation

which may lead to difficulty breathing and tightness in the chest.

Ingestion

Material is not harmful if ingested. Cyanoacrylates are almost impossible to swallow because they solidify in the mouth.

4. First Aid Information

Eye Contact

Flush with warm water. If eyelids are bonded closed, release eyelashes with warm water by covering the eye with a wet pad. Do not force eye open. See supplemental section for emergency action.

Skin Contact

Soak in warm water. Do not pull skin apart. See supplemental section for emergency action.

Inhalation

Remove to fresh air. If symptoms persist, obtain appropriate medical attention.

Ingestion

Ingestion is unlikely. See supplemental section for emergency action.

First Aid Supplement

Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds to 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, fabrics, 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 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 pull the surfaces apart with a direct opposing action.

Adhesive in eye

Adhesive introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods, usually 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. Peel or roll lips apart. Do not try to pull the lips apart 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

Cyanoacrylate gives 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.

5. Fire Fighting Measures

Flash Point 150 - 200F
FP Method Tag Closed Cup

Extinguishing Media

Carbon Dioxide, Dry Chemical, Foam

Special Fire Fighting Procedures

Wear self- contained breathing apparatus.

Unusual Fire or Explosion Hazards

None known

6. Accidental Release Measures

Steps to be taken in case of spill or release

Observe all personal protection equipment recommendations. Do not use cloths for clean up. Flood spilled material with water to polymerize. Cured material can be scrapped up and disposed of as nonhazardous waste. Make sure spill area is well ventilated.

Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable.

7. Handling and Storage

Handling

Avoid contact with skin, eyes and clothing. Avoid breathing vapor or mist. Avoid contact with paper goods or fabric. Contact with these materials may cause rapid polymerization

which can generate smoke and strong irritating vapors.

Storage

Store away from heat and direct sunlight to maximize shelf life. Store inside in a dry location. Keep container tightly closed.

8. Exposure Controls and Personal Protection

Eye Protection

Safety goggles or glasses with side shields are recommended.

Skin Protection

Polyethylene or non-reactive gloves. Do not use cotton or wool.

Ventilation

Local exhaust ventilation is recommended to maintain vapor level below TLV.

Respiratory Protection

Not applicable with good local exhaust. Use NIOSH approved respirator if there is a potential to exceed exposure limits.

9. Physical and Chemical Properties

Physical State	Liquid
Specific Gravity	1.06
Color/Appearance	Clear
Odor	Sharp, irritating
pH	Not applicable
Boiling/Cond. Point	Greater than 300F
Melting/Freezing Point	Not determined
Solubility	Negligible Polymerized by wa
Evaporation Rate	Not applicable
VOC %	Less than 20 g/L (estimated)
Vapor Density	Approximately 3 (Air=1)
Vapor Pressure	Less than 0.2 mm Hg @ 25C

Note

The above information is not intended for use in preparing product specifications. Contact Accumetric LLC before writing specifications.

10. Stability and Reactivity

Chemical Stability

Stable under the recommended storage and handling conditions.

Hazardous Polymerization

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

Materials to Avoid / Incompatibility

Polymerized by contact with water, alcohols, amines, and alkalis.

11. Toxicological Information

NIOSH - Selected LD50s and LC50s

Acute oral LD50: >5,000 mg/kg (rat) (estimated)

Acute dermal LD50: >2,000 mg/kg (rabbit) (estimated)

12. Ecological Information

Environmental Effects

Complete information is not yet available.

Environmental Fate and Distribution

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

13. Disposal Considerations

Waste Disposal Method

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

This product is not known to be regulated under RCRA regulations. Disposal of unused portions of this product and process waste containing this product should be done only after a careful evaluation and in compliance with all federal, local and state laws.

14. Transportation Information

DOT Road Shipment Information

Proper Shipping Name: Combustible liquid, n.o.s. (more than 450 liters)

Hazard Class or Division: Combustible liquid (more than 450 liters)

Identification Number: NA1993 (more than 450 liters)

Exceptions: Unrestricted under 450 liters

Marine pollutant: No

Air Shipment (IATA)

Proper Shipping Name: Aviation regulation liquids, n.o.s. (Cyanoacrylate ester)

Hazard Class or Division: 9

Identification Number: UN3334

Packing Group: None

Exceptions: Unrestricted under 500 mL

Ocean Shipment (IMDG)

Proper Shipping Name: Unrestricted

Hazard Class or Division: None
Identification Number: None
Packing Group: None
Marine Pollutant: None

15. Regulatory Information

The contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA Title III Section 302 Extremely Hazardous Substances

None

SARA Title III Section 304 CERCLA Hazardous Substances

None

SARA Title III Section 312 Hazard Class

Acute: Yes
Chronic: Yes
Fire: Yes
Pressure: No
Reactive: Yes

SARA Title III Section 313 Toxic Chemicals

None present or none present in regulated quantities.

California Proposition 65

This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm:

None known

16. Other Information

Disclaimer

The data contained herein is based upon information that Accumetric LLC believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements to suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.