

MSDS
Material Safety Data Sheet
PERMABOND® 102



READ MATERIAL SAFETY DATA SHEET BEFORE HANDLING PRODUCT!

Issue Date 02/11/05

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

PRODUCT NAME

Manufacturer

PERMABOND® 102

PERMABOND LLC

20 World's Fair Drive

Somerset, NJ 08873

EMERGENCY PHONES:

MEDICAL – 1-866-827-6282

TRANSPORT - (CHEMTREC) – 1-800-424-9300

MSDS REQUESTS: HELP LINE: 1-800-640-7599

SYNONYMS

SUPER GLUE

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY

COMPONENT

Ethyl cyanoacrylate

Cyanoacrylate Adhesive

CAS NUMBER

7085-85-0

CONCENTRATION (%)

60 - 100

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING.

ON CONTACT, WILL BOND EYELIDS TOGETHER

SKIN IRRITANT. ON CONTACT WILL BOND SKIN

Colorless Liquid Pungent odor

EYE

On contact, will bond eyelids together.

SKIN CONTACT

Repeated or prolonged skin contact may result in moderate irritation. On contact, immediate bonding of the skin will occur.

INHALATION

Vapor may be irritant to the respiratory tract.

INGESTION

On contact, immediate bonding of mouth could occur.

4. FIRST-AID MEASURES

EYE

Flush with large amounts of water while holding eyelids open. Get medical attention immediately. Cured adhesive will not bond well to surface of eye, but corneal damage from abrasion may result. Do not wear contact lenses when working with this material.

SKIN CONTACT

No attempt should be made to remove material from skin or to remove contaminated clothing, as the bonded skin can be easily torn. Wash with large volumes of soap and water while flexing bonded skin parts. This procedure will slowly release bonded areas. DO NOT mechanically remove cured adhesive or attempt to pull skin apart.

INHALATION

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

INGESTION

Immediate bonding of mouth will occur. Get medical attention.

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5. FIREFIGHTING MEASURES

| | |
|---------------------------------|---|
| FLASH POINT | 167 °F (Setaflash Closed Tester) |
| EXTINGUISHING MEDIA | CO2; Dry Chemical; Foam |
| SPECIAL FIREFIGHTING PROCEDURES | Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. |
| FIRE & EXPLOSION HAZARDS | Cloths used to wipe up spills may cause rapid polymerization that could generate sufficient heat to ignite the cloth. |
| FLAMMABILITY HAZARD CLASS | Combustion will evolve toxic and irritant vapors. 2 = Moderate. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|---------------------------|--|
| SPILL AND LEAK PROCEDURES | SMALL SPILLS: wipe up with cloth. Immediately soak cloth with water to polymerize the adhesive. Caution! Cloth containing adhesive may undergo autoignition if not soaked with water. LARGE SPILLS: flood area with water. When cured, remove film with a scraper. Wear NIOSH approved respirator for organic vapors if needed, and protective clothing. |
|---------------------------|--|

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

7. HANDLING AND STORAGE

| | |
|---------------------|---|
| STORAGE TEMPERATURE | = 35 - 45 °F = 2 - 7 °C |
| HANDLING/STORAGE | Keep away from heat, sources of ignition and direct sunlight. Keep material refrigerated at the storage temperature referenced above. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | |
|-----------------------------|--|-------------------------------------|
| COMPONENT | EXPOSURE LIMITS | |
| Ethyl cyanoacrylate | ACGIH-TWA: 0.2 ppm | OSHA-PEL: 2 ppm OSHA-STEL: 4 ppm |
| VENTILATION REQUIREMENTS | Local. | |
| EYE PROTECTION REQUIREMENTS | Safety glasses, goggles or face shield to protect against splashing. | |
| GLOVE REQUIREMENTS | Wear polyethylene gloves. Do not wear rubber or cloth gloves. | |
| CLOTHING REQUIREMENTS | No special clothing required for low volume activity. | |
| WASH REQUIREMENTS | Wash before eating, drinking, or using toilet facilities. | |
| RESPIRATOR REQUIREMENTS | Avoid prolonged or repeated breathing of vapor or mists. If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent overexposure. | |

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9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------|----------------------------------|
| PURE SUBSTANCE OR MIXTURE | Mixture |
| PHYSICAL FORM | Liquid |
| COLOR | Colorless |
| ODOR | Pungent |
| PH AS IS | Not applicable |
| pH IN (1%) SOLUTION | Not applicable |
| OXIDIZING PROPERTIES | Not applicable |
| BOILING POINT | 1403 °F |
| MELTING/FREEZING POINT | Not available |
| SOLUBILITY IN WATER | Insoluble |
| VISCOSITY | 100 cPs |
| SPECIFIC GRAVITY (WATER=1) | 1.05 |
| BULK DENSITY | 8.75 lb/gal |
| VAPOR PRESSURE (mmHg) | 0.3 |
| VAPOR DENSITY (air = 1) | >1 |
| VOLATILES | Nil |
| VOLATILE ORGANIC COMPOUNDS | Nil |
| FLASH POINT | 167 °F (Setaflash Closed Tester) |

10. STABILITY AND REACTIVITY

| | |
|----------------------------------|--|
| STABILITY | Stable |
| REACTIVITY HAZARD CLASS | 2 = Reactive material. |
| HAZARDOUS DECOMPOSITION PRODUCTS | Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide and carbon dioxide. |

11. TOXICOLOGICAL INFORMATION

| | |
|----------------|--|
| ROUTE OF ENTRY | Inhalation; Skin Contact; Eye Contact; Ingestion |
|----------------|--|

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

| | |
|---------------|--------------------------------|
| TARGET ORGANS | Skin; Eyes; Respiratory system |
| CARCINOGEN | No. |

| COMPONENT | ORAL TOXICITY | NOTES ON ORAL TOXICITY |
|---------------------|--------------------------|---|
| Ethyl cyanoacrylate | Oral LD50: Rat 180 mg/kg | Ingestion may cause irritation of the gastrointestinal tract. On contact, immediate bonding of mouth could occur. |

| COMPONENT | DERMAL TOXICITY | NOTES ON DERMAL TOXICITY |
|---------------------|-------------------------------|---|
| Ethyl cyanoacrylate | Dermal LD50: Rabbit 220 ml/kg | Irritating to the skin. On contact, immediate bonding of the skin will occur. |

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11. TOXICOLOGICAL INFORMATION – CONT'D

| COMPONENT | INHALATION TOXICITY | NOTES ON INHALATION TOXICITY |
|---------------------|---------------------|---|
| Ethyl cyanoacrylate | | Vapor, if generated, can cause irritation of the eyes, nose and respiratory tract. Avoid breathing vapors or mists. |
| COMPONENT | | NOTES ON EYE IRRITATION |
| Ethyl cyanoacrylate | | On contact, will bond eyelids together. Vapors are lachrymatory. Will cause eye irritation. Cyanoacrylates will not bond to the eye but may cause corneal scratching. |

12. ECOLOGICAL INFORMATION

| | |
|----------------------------|------------------|
| POTENTIAL TO BIOACCUMULATE | Unknown. |
| AQUATIC TOXICITY | None Established |

13. DISPOSAL CONSIDERATIONS

| | |
|--------------------------|---|
| WASTE DISPOSAL METHODS | Disposal should be in accordance with local, state or national legislation. |
| EMPTY CONTAINER WARNINGS | Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied. |

14. TRANSPORTATION INFORMATION

This section provided for general information only.
FOR NON-BULK SHIPMENTS.

FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

DOT CLASSIFICATION

| | |
|----------------------|----------------------------|
| PROPER SHIPPING NAME | COMBUSTIBLE LIQUID, N.O.S. |
| TECHNICAL NAME | (ETHYL CYANOACRYLATE) |
| HAZARD CLASS | N |
| U.N. NUMBER | NA1993 |
| PACKING GROUP | III |

The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

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15. REGULATORY INFORMATION

USA

TSCA

All components are on the TSCA inventory.

SARA/TITLE III

Contains no substances at or above the reporting threshold under Section 313.

CAS NUMBER

CONCENTRATION (%)

16. OTHER INFORMATION

MSDS DATE

02/11/05

This MSDS contains changes from the previous one in section 1; the medical emergency phone number was changed.

FOR INFORMATION CONTACT:

Permabond LLC
HELP Line: 1-800-640-7599

ADDITIONAL INFORMATION: The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guaranty of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.