SAFETY DATA SHEETS

This SDS packet was issued with item:

076708606

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

076708226

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

076708598

Material Safety Data Sheet





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 Cyanoacrylate Adhesive

COMPONENT CAS NUMBER CONCENTRATION (%)

Ethyl cyanoacrylate 7085-85-0 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

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. 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) CO2; Dry Chemical; Foam **EXTINGUISHING MEDIA**

SPECIAL FIREFIGHTING PROCEDURES Fire fighters should be equipped with self-contained

breathing apparatus to protect against potentially toxic and

irritating fumes.

Cloths used to wipe up spills may cause rapid polymerization FIRE & EXPLOSION HAZARDS

that could generate sufficient heat to ignite the cloth. Combustion will evolve toxic and irritant vapors.

FLAMMABILITY HAZARD CLASS 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 $= 35 - 45 \infty F$ $= 2 - 7 \infty C$

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

ACGIH-TWA: 0.2 ppm OSHA-PEL: 2 ppm Ethyl cyanoacrylate

OSHA-STEL: 4 ppm

VENTILATION REQUIREMENTS

EYE PROTECTION REQUIREMENTS Safety glasses, goggles or face shield to protect against splashing. Wear polyethylene gloves. Do not wear rubber or cloth gloves. **GLOVE REQUIREMENTS**

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.

Material Safety Data Sheet





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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 1403 ∞F **BOILING POINT** MELTING/FREEZING POINT Not available Insoluble SOLUBILITY IN WATER 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 Irritating to the skin. On contact, immediate bonding

ml/kg of the skin will occur.

MSDS Material Safety Data Sheet

PERMABOND® 102



READ MATERIAL SAFETY DATA SHEET BEFORE HANDLING PRODUCT!

Issue Date 02/11/05

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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Issue Date 02/11/05

15. REGULATORY INFORMATION

USA

TSCA All components are on the TSCA inventory.

SARA/TITLE III CAS NUMBER CONCENTRATION (%)

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

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.

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