

MSDS

Material Safety Data Sheet

PERMABOND® 910



READ MATERIAL SAFETY DATA SHEET BEFORE HANDLING PRODUCT!

Issue Date 10/03/06

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

PRODUCT NAME

PERMABOND® 910

adhesive

Manufacturer

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 (%)

Methyl-2-cyanoacrylate

137-05-3

60 - 100

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING.

ON CONTACT, WILL BOND EYELIDS TOGETHER

EYE IRRITANT. SKIN IRRITANT.

ON CONTACT WILL BOND SKIN

Colorless Liquid Pungent odor

EYE

Will cause eye irritation. 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. 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

AUTOIGNITION	Not available
FLASH POINT	167 °F (Setaflash Closed Tester)
EXTINGUISHING MEDIA	CO ₂ ; 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. Combustion will evolve toxic and irritant vapors.
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable
FLAMMABILITY HAZARD CLASS	1 = Slight.

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.
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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.
Other Precautions	Store in tightly closed containers to prevent moisture contamination. Do not seal if contamination is suspected. Avoid skin and eye contact. Do not breath vapors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	Exposure Limits	
Methyl-2-cyanoacrylate	ACGIH-TWA: 0.2 ppm	OSHA-PEL: 2 ppm OSHA-STEL: 4 ppm
Ventilation Requirements	Local.	
Eye Protection Requirements	Wear safety glasses with side shields.	
Glove Requirements	Employee must wear appropriate protective gloves to prevent contact with this substance.	
Clothing Requirements	No special clothing required for low volume activity.	
Change/Removal of Clothing	Not normally required.	
Wash Requirements	Wash before eating, drinking, or using toilet facilities.	
Respirator Requirements	None required under normal handling conditions. Use NIOSH approved respirator if vapor or mist levels are irritating.	

Permabond®
Engineering Adhesives

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PURE SUBSTANCE OR MIXTURE	Mixture
PHYSICAL FORM	Liquid
COLOR	Colorless
ODOR	Pungent
ODOR THRESHOLD	Not available
PH AS IS	Not applicable
pH IN (1%) SOLUTION	Not applicable
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	118 °F
MELTING/FREEZING POINT	Not available
SOLUBILITY IN WATER	Insoluble
PARTITION COEFFICIENT (n-octanol/water)	Not applicable
VISCOSITY	100 cPs
SPECIFIC GRAVITY (WATER=1)	1.1
BULK DENSITY	9.16 lb/gal
EVAPORATION RATE	Not applicable
VAPOR PRESSURE (mmHg)	0.3 mm Hg
VAPOR DENSITY (air = 1)	>1
VOLATILES	Nil
VOLATILE ORGANIC COMPOUNDS	Nil
AUTOIGNITION	Not available
FLASH POINT	167 °F (Setaflash Closed Tester)

STABILITY	Stable
MATERIALS TO AVOID	Moisture
REACTIVITY HAZARD CLASS	2 = Reactive material.
HAZARDOUS DECOMPOSITION PRODUCTS	Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide and carbon dioxide.
HAZARDOUS POLYMERIZATION CONDITIONS	Contamination of adhesive with alkaline materials, peroxides or water can result in rapid polymerization. In large quantities, this could lead to an uncontrollable rise in temperature and a buildup of pressure in closed containers.

ROUTE OF ENTRY	Inhalation; Skin Contact; Eye Contact; Ingestion
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TARGET ORGANS	Skin; Eyes; Respiratory system	
CARCINOGEN	No.	
COMPONENT	ORAL TOXICITY	NOTES ON ORAL TOXICITY
Methyl-2-cyanoacrylate	Oral LD50: Rat > 1.6 - 3.2 g/kg	Ingestion may cause irritation of the gastrointestinal tract. On contact, immediate bonding of mouth could occur.

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11. TOXICOLOGICAL INFORMATION (Cont'd)

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

COMPONENT	DERMAL TOXICITY	NOTES ON DERMAL TOXICITY
Methyl-2-cyanoacrylate	Dermal LD50: Guinea Pig > 10 ml/kg	Irritating to the skin. On contact, immediate bonding of the skin will occur.
COMPONENT	INHALATION TOXICITY	NOTES ON INHALATION TOXICITY
Methyl-2-cyanoacrylate	Inhalation LC50 (6.00hr): Rat 101 ppm	Vapor, if generated, can cause irritation of the eyes, nose and respiratory tract. Avoid breathing vapors or mists.
COMPONENT		NOTES ON EYE IRRITATION
Methyl-2-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.

U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: Combustible liquids, n.o.s. (Cyanoacrylate ester)

Hazard class or division: 3

Identification number: NA 1993

Packing group: None

Exceptions: (Not more than 450 Liters) Unrestricted

Marine pollutant: Dibutyl phthalate

Please note that Cyanoacrylates are not restricted for domestic ground transportation in non bulk containers (The DOT defines a bulk container as a "Package" containing more than 450 liters. The "Package" is the individual bottle, tube or drum, not a carton containing many bottles.

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14. TRANSPORTATION INFORMATION (Cont'd)

International Air Transportation (ICAO/IATA):

Proper shipping name: Aviation regulated liquids, n.o.s (Cyanoacrylate ester)

Hazard class or division: 9

Identification number: UN3334

Packing group: III

Exceptions: (Not more than 500ml) Unrestricted

Please note that Cyanoacrylates are restricted for air transportation in packages containing more than 500gr. The "Package" is the individual bottle, tube or drum, not a carton containing many bottles. Permabond's 3g, 20gr, 1 ounce(28.4 gr), 1 pound(454gr) and 500gr, are not restricted for air transportation.

Water Transportation (IMO/IMDG):

Proper shipping name: Unrestricted

Hazard class or division: None

Identification number: None

Packing group: None

Marine pollutant: None

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.

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

10/03/06

This MSDS contains changes from the previous one in section 14; Update on Transportation Information.

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.