

Safety Data Sheet

PERMABOND TA4246

Revision Number: 5

Issue date: 11/15/17

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PERMABOND TA4246
Product Type: Acrylic Adhesive

Telephone: 732-868-1372 or 800-640-7599
Website: www.permabond.com

Company: PERMABOND LLC
14 Robinson Street
Pottstown, PA 19464
USA

Emergency Telephone:

Medical: Poison Control Center 866-827-6282 (toll free)
or 1-303-389-1109
Transport: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR
CAUSES SERIOUS EYE DAMAGE
CAUSES SKIN IRRITATION
MAY CAUSE AN ALLERGIC SKIN REACTION
MAY CAUSE RESPIRATORY IRRITATION

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SERIOUS EYE DAMAGE	1
SKIN IRRITATION	2
SPECIFIC TARGET ORGAN TOXICITY- SINGLE EXPOSURE- RESPIRATORY SYSTEM	3
SKIN SENSITIZATION	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces – No smoking. Keep container tightly closed. Do not release into water. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Avoid breathing vapors, mist or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection and face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician or a poison control center
IF IN EYES: Rinse cautiously with plenty of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or a physician.
IF ON SKIN/HAIR: Immediately remove all contaminated clothing. Rinse with plenty of water.

If you feel unwell call a poison control center or a physician. If eye irritation occurs: Get medical attention. If skin irritation occurs: Get medical attention. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Storage: Store in a well-ventilated cool place. Keep container tightly closed. Store locked up.

Disposal: Dispose of according to Federal, State/Provincial and local governmental regulations.

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	CONCENTRATION (%)*
Methyl Methacrylate	80-62-6	30 – 60
Methacrylic acid	79-41-4	5 - 10
Epoxy resin	25068-38-6	5 – 10

*Exact concentration is a trade secret. Concentration ranges are provided to assist user in determining appropriate protection.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact: Immediately wash skin with plenty of soap and water. If symptoms develop or persist get medical attention. Remove contaminated clothing and footwear. Wash clothing and clean footwear before reuse.

Eye contact: Immediately flush with large amounts of water for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting. Get medical attention.

Symptoms: See section 11

Notes to Physician:

5. FIRE-FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Fire fighter should wear positive pressure self-contained breathing apparatus. Water should be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

Unusual fire or explosion hazards: Vapors may accumulate in low confined areas, travel considerable distance to sources of ignition, and flash back

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Acids. Alcohols, Aldehydes. Toxic fumes. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection equipment recommended in section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Remove all sources of ignition. Prevent product from entering drains or waterways.

Clean-up methods: Ensure adequate ventilation. Contain spillage, if safe to do so. Soak up with inert absorbent material (e.g. sand, silica gel, acid binders, universal binder, saw dust). Store in partially filled closed container until proper disposal. Refer to section 8 (Exposure Controls/ Personal Protection) before clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor or mist. Keep away from sources of ignition – No smoking. Wash thoroughly after handling. Make sure containers are properly grounded.

Storage: Store in a cool well ventilated area. Keep container closed. Store away from sources of ignition.

For shelf life information contact Permabond customer service at (800)714-0170

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employees should complete an assessment of all workplaces to determine the need for and selection of proper exposure controls and protective equipment before each task is started.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Methyl methacrylate	50 ppm TWA 100 ppm STEL	100 ppm (400 mg/m3) PEL	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Epoxy resin	None	None	None	None

Engineering controls: Local exhaust ventilation is recommend when general ventilation is insufficient to maintain vapor concentrations below established exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134)

Skin protection: Use chemical resistant impermeable clothing including gloves to prevent skin contact.

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be wo-rn if the potential for splashing or spray exists.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Clear/Amber
Odor:	Sharp
Odor threshold:	Not Available
pH:	Not available
Vapor pressure:	28 mm Hg
Boiling point/range:	>38°C (>100.4 °F)
Melting point/range:	Not available
Specific gravity:	1.1 at 23.9°C (75°F)
Vapor density:	>1
Flash point:	14 °C (57.2°F)
Flammable/Explosive limits – Lower:	Not available
Flammable/Explosive limits – upper:	Not available
Autoignition Temperature:	Not available
Evaporation rate:	Faster than ether
Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available
Decomposition temperature:	Not available
VOC content:	<2 %, 20 grams/liter (Estimated) adhesive and activator mixed

10. STABILITY AND REACTIVITY

Stability:	Stable when stored under the recommended storage conditions
Hazardous reactions:	Polymerization may occur at elevated temperatures or upon loss of inhibitor
Hazardous decomposition products:	Oxides of carbon. Oxides of phosphorous. Oxides of sulfur. Acids. Alcohols. Aldehydes. Toxic fumes. Irritating vapors
Incompatible materials:	Acids. Oxidizing agents. Reducing agents. Bases. Free radical initiators. Peroxides.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition. Contact with incompatible materials. Protect from light. Loss of inhibitor.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Drowsiness. Dizziness.
Skin contact: Causes skin irritation. May cause allergic skin reaction.
Eye contact: Causes serious eye damage.
Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous components	LD50	LC50	Immediate and delayed Health Effects
Methyl methacrylate	LD50 – Oral (RAT) - 7,800 mg/Kg LD50 – Dermal (RABBIT) > 5,000 mg/Kg	LC50-Inhalation (RAT, 4 h) – 78,000 mg/ m3	Allergen, irritant, Kidney, Liver, Mutagen, Central Nervous System, respiratory system
Methacrylic acid	LD50 – Oral (RABBIT) – 1,200 mg/kg LD50 – Oral (RAT) – 1,060 mg/Kg LD50 – Dermal (RABBIT) – 500 mh/Kg	LC50 – Inhalation (RAT, 4h) – 7.1 mg/l	Corrosive, Irritant, Allergen
Epoxy resin	LD50 – Oral (RAT) 13,000 mg/Kg	None	Irritant, Allergen

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Methyl Methacrylate	No	No	No
Methacrylic acid	No	No	No
Epoxy resin	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not Available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State/Provincial and local governmental regulations. Refer to section 8 (Exposure Controls/Personal Protection) before handling.

14. TRANSPORT INFORMATION

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

Proper shipping name: Flammable liquid, Corrosive, N.O.S., (contains Methylmethacrylate and Methacrylic Acid)
Hazard class or division: 3 (8)
Identification number: UN2924
Packing group: II
Exceptions:

International Air Transportation (ICAO/IATA):

Proper shipping name: Flammable liquid, Corrosive, N.O.S., (contains Methyl methacrylate and Methacrylic Acid)
Hazard class or division: 3 (8)
Identification number: UN2924
Packing group: II
Exceptions:

Water Transportation (IMO/IMDG):

Proper shipping name: Flammable liquid, Corrosive, N.O.S., (contains Methyl methacrylate and Methacrylic Acid)
Hazard class or division: 3 (8)
Identification number: UN2924
Packing group: II
Exceptions:
Marine pollutant: Limited quantities

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above the reporting limits.
CERCLA/SARA Section 302 EHS: None above the reporting limits.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA 313: Methyl methacrylate (CAS# 80-62-6)
California Proposition 65: No chemical listed on the California Proposition 65 are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous one: Section 14 – Added sub risk

Issue date: 11/15/17

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.