

SAFETY DATA SHEET Permabond 825

1. Identification		
Product identifier		
Product name	Permabond 825	
Recommended use of the ch	emical and restrictions on use	
Application	Adhesive.	
Details of the supplier of the	Details of the supplier of the safety data sheet	
Supplier	Permabond LLC 14 Robinson Street Pottstown, PA 19464 USA Telephone: 732-868-1372 or 800-640-7599 Website: www.permabond.com	
Emergency telephone number	er	
Emergency telephone	Medical: Poison Control Center 866-827-6282 (toll free) or 303-389-1109 Transport: CHEMTREC 800-424-9300	
2. Hazard(s) identification		
Classification of the substance or mixture		
OSHA Regulatory Status	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).	
Physical hazards	Not Classified	
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H335	
Label elements		
Hazard symbols		
Signal word	Warning	
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.	

Precautionary statements	 P261 Avoid breathing vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 If on skin: Wash with plenty of water. P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a poison center/ doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Contains	P501 Dispose of contents/ container in accordance with national regulations. ETHYL 2-CYANOACRYLATE

Other hazards

None under normal conditions.

3. Composition/information on ingredients

Mixtures

ETHYL 2-CYANOACRYLATE

CAS number: 7085-85-0

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H335

POLY(OXY-1,2-ETHANEDIYL), A,A'-[(1-METHYLETHYLIDENE)DI-4,1-PHENYLENE]BIS[Ω-[(2-METHYL-1-OXO-2-PROPEN-1-YL)OXY]-

CAS number: 41637-38-1

Classification

Not relevant.

Tert-butyl Perbenzoate

CAS number: 614-45-9

Classification

Org. Perox. C - H242 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Not relevant.

2/9

5-10%

30-60%

<1%

CYCLOHEXANE	<1%
CAS number: 110-82-7	
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Not relevant.	
Not relevant.	
1,4-DICHLOROBENZENE	<1%
CAS number: 106-46-7	
Classification Eye Irrit. 2A - H319 Carc. 2 - H351 Not relevant.	
CHLOROBENZENE CAS number: 108-90-7	<1%
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Not relevant.	
The full text for all hazard sta	tements is displayed in Section 16.
Composition comments	Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.
4. First-aid measures	
Description of first aid measu	ires
Inhalation	Get medical attention if any discomfort continues.
Ingestion	On contact, immediate bonding of mouth could occur. Do not induce vomiting. Get medical attention.
Skin Contact	On contact, immediate bonding of the skin will occur. No attempt should be made to remove material from skin or to remove contaminated clothing, as the bonded skin can be easily torn. Wash skin thoroughly with soap and water.
Eye contact	Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. If adhesive bonding occurs, do not force eyelids apart. Apply a pad soaked in warm water and allow the eyelids to separate. Get medical attention. Cured adhesive will not bond well to surface of eye, but corneal damage from abrasion may result.
Most important symptoms an	d effects, both acute and delayed
Inhalation	Irritation of nose, throat and airway.
Ingestion	On contact, immediate bonding of mouth could occur.
Skin contact	Prolonged skin contact may cause redness and irritation.

Eye contact	Irritating and may cause redness and pain.
-	
Notes for the doctor	al attention and special treatment needed SKIN BONDING. Prise the skin apart slowly working from the edge of the bonded area. This can be eased by using warm soapy water. EYE BONDING. DO NOT force eyelids apart. Apply a pad soaked in warm water and allow the eye to separate itself.
5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Special hazards arising from the	he substance or mixture
Specific hazards	Cloths used to wipe up spills may cause rapid polymerization that could generate sufficient heat to ignite the cloth.
Hazardous combustion products	Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide, carbon dioxide, and hydrogen cyanide.
Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapors.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
6. Accidental release measure	S
Personal precautions, protectiv	ve equipment and emergency procedures
Personal precautions	For personal protection, see Section 8. Provide adequate ventilation.
Environmental precautions	
Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
Methods and material for conta	ainment and cleaning up
Methods for cleaning up	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.
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
7. Handling and storage	
Precautions for safe handling	
Usage precautions	Ensure adequate ventilation of the working area. Avoid contact with skin, eyes and clothing. Avoid breathing vapours. Always replace cap after use.
Conditions for safe storage, in	cluding any incompatibilities
Storage precautions	Store in tightly-closed, original container in a dry and cool place. Keep away from heat, sparks and open flame. Keep container tightly sealed when not in use.
Specific end uses(s)	
Specific end use(s)	Adhesive.
8. Exposure controls/Persona	I protection
Control parameters	

Control parameters

Occupational exposure limits

ETHYL 2-CYANOACRYLATE

Long-term exposure limit (8-hour TWA): ACGIH 0.2 ppm 1 mg/m³

CYCLOHEXANE

Long-term exposure limit (8-hour TWA): ACGIH 100 ppm 344 mg/m³ Long-term exposure limit (8-hour TWA): OSHA 300 ppm 1050 mg/m³

1,4-DICHLOROBENZENE

Long-term exposure limit (8-hour TWA): OSHA 75 ppm 450 mg/m³ Long-term exposure limit (8-hour TWA): ACGIH 10 ppm 60 mg/m³ A3

CHLOROBENZENE

Long-term exposure limit (8-hour TWA): OSHA 75 ppm 350 mg/m³ Long-term exposure limit (8-hour TWA): ACGIH 10 ppm 46 mg/m³ A3

ACGIH = American Conference of Governmental Industrial Hygienists. OSHA = Occupational Safety and Health Administration. A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Exposure controls

Appropriate engineering controls	Observe any occupational exposure limits for the product or ingredients. Mechanical ventilation or local exhaust ventilation may be required.
Eye/face protection	Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.
Hand protection	Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should not be worn.
Other skin and body protection	Uniforms, coveralls, or a lab coat should be worn
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Colorless.
Odor	Pungent. Irritating.
Odor threshold	1 - 2 ppm
рН	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	>149ºC (300ºF)
Flash point	80°C – 93°C (176°F - 199.94°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.

Vapor pressure	~0.6 mbar @ 25°C
Vapor density	Not applicable.
Relative density	1.05
Bulk density	Not applicable.
Solubility(ies)	Hardens in contact with water. Insoluble in water. Miscible with the following materials: acetone
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	≈120 mPa s @ 25°C
Oxidizing properties	Not applicable.
Volatile organic compound	<2 %, 20 grams/liter (Estimated)
10. Stability and reactivity	
Reactivity	The product reacts with water and will generate heat.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Reactions with the following materials may generate heat: Water Alcohols. Alkalis. Amines.
Conditions to avoid	Do not add water directly to the product. It may cause a violent reaction.
Materials to avoid	Water. Amines. Alkalis. Alcohols.
Hazardous decomposition products	Heating may generate the following products: Toxic gases/vapors/fumes of: Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx). Hydrogen cyanide (HCN).
11. Toxicological information	
Information on toxicological ef	fects
Toxicological effects	The toxicological properties of this product have not been fully evaluated. Avoid direct contact with skin or eyes. Do not ingest or inhale.
Skin corrosion/irritation Skin corrosion/irritation	Irritating to skin.
Serious eye damage/irritation Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitization Respiratory sensitization	Based on available data the classification criteria are not met.
Skin sensitization Skin sensitization	Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	

Carcinogenicity	Does not contain any substances known to be carcinogenic.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity -	single exposure
STOT - single exposure	STOT SE 3 - H335
Target organs	Respiratory system, lungs
Specific target organ toxicity -	repeated exposure
STOT - repeated exposure	Not classified as a specific target organ toxicant after a single exposure.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.
Inhalation	May cause respiratory system irritation.
Ingestion	On contact, immediate bonding of mouth could occur.
Skin Contact	On contact, immediate bonding of the skin will occur. May cause skin irritation.
Eye contact	Irritating to eyes. On contact, will bond eyelids together. Vapours are lachrymatory.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	Respiratory system, lungs
12. Ecological information	
Ecotoxicity	There are no data on the ecotoxicity of this product.
Bioaccumulative potential	
Partition coefficient	Not available.
13. Disposal considerations	
Waste treatment methods	
General information	Dispose of according to Federal, State/Provincial and local regulations. Refer to section 8 before handling.
14. Transport information	
Soo transport notes	Not classified.
Sea transport notes	
Air transport notes	Applies only to inner containers > 500ml. Inner packaging containing less than 500ml are unregulated for air transportation and may be shipped unrestricted. But inner packages containing more than 500ml meet the criteria of IATA 3.9.2.1 and are regulated. The "inner package" is the individual bottle, tube or drum, not the outer packaging such as a fiberboard box or carton containing many bottles. Permabond 3g, 20gr, 1 ounce (28.4 gr), 1 pound (454gr) and 500ml, are not restricted for air transportation.

DOT transport notes	This product is not regulated for road transportation in accordance with 49 CFR Exceptions. 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
UN Number	
UN No. (IMDG)	Not applicable
UN No. (ICAO)	3334
UN No. (DOT)	NA1993
UN proper shipping name	
Proper shipping name (IMDG)	Not applicable
Proper shipping name (ICAO)	AVIATION REGULATED LIQUID, N.O.S (Cyanoacrylate ester)
Proper shipping name (DOT)	COMBUSTIBLE LIQUID, N.O.S. (Cyanoacrylate ester)
Transport hazard class(es)	
DOT hazard class	Combustible Liquid
IMDG Class	Not applicable
ICAO class/division	9
Packing group	
IMDG packing group	Not applicable
ICAO packing group	III
DOT packing group	III
Environmental hazards	
Environmentally Hazardous Su No.	ubstance

15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities None above reporting limits.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None above reporting limits

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None above reporting limits

SARA 313 Emission Reporting

None above reporting limits

SARA (311/312) Hazard Categories

Acute Chronic Fire Reactivity

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

1,4-DICHLOROBENZENE

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None above reporting limits

16. Other information	
Classification abbreviations and acronyms	Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Skin Irrit. = Skin irritation STOT SE = Specific target organ toxicity-single exposure
Revision date	1/31/2020
Revision	2
Supersedes date	10/11/2019
Hazard statements in full	 H225 Highly flammable liquid and vapor. H226 Flammable liquid and vapor. H242 Heating may cause a fire. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.