

## Safety Data Sheet

### PERMABOND ANTI-SEIZE

Revision Number: 4

Issue date: 05/05/15

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** PERMABOND ANTI-SEIZE  
**Product Type:** Anti-seize compound  
**Company:** PERMABOND LLC  
14 Robinson Street  
Pottstown, PA 19464  
USA

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

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

#### 2. HAZARDS IDENTIFICATION

Not Hazardous in accordance with OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Hazardous Phrases:** None

**Precautionary Statements:** None

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

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS NUMBER	CONCENTRATION (%)*
Copper	7440-50-8	15 – 30
Distillates (petroleum, hydrogenated heavy naphthenic	64742-52-5	15 – 30
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	15 – 30
Graphite	7782-42-5	10 – 20
Aluminum	7429-90-5	5 – 8

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

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).

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. Keep comfortable for breathing. If irritation occurs get medical attention.
<b>Skin contact:</b>	Wash thoroughly with soap and water. Get medical attention if irritation persists.
<b>Eye contact:</b>	Flush with large amounts of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion:</b>	If large amounts are ingested, seek medical attention.
<b>Symptoms:</b>	See section 11

#### 5. FIRE-FIGHTING MEASURES

<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special fire fighting procedures:</b>	Wear self-contained breathing apparatus and protective clothing. In case of fire keep container cool with water spray.
<b>Unusual fire or explosion hazards:</b>	Hazardous decomposition may generate oxides of carbon.
<b>Hazardous combustion products:</b>	Toxic and/or irritating organic vapors may be generated. Oxides of carbon.

#### 6. ACCIDENTAL RELEASE MEASURES

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

<b>Environmental precautions:</b>	Prevent product from entering drains or waterways.
<b>Clean-up methods:</b>	Because of its viscous nature, this product is not expected to leak or spill. In case it does, collect spill using an inert absorbent material and place in suitable container for disposal. Clean area thoroughly with mineral spirits. Refer to section 8 (Exposure Controls/ Personal Protection) before clean up.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Prevent contact with eyes. Avoid prolonged skin contact. Wash thoroughly after handling. Keep container tightly closed.
<b>Storage:</b>	Store away from extreme heat and open flames. Store away from concentrated oxygen.  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
Copper	1 mg/m3 TWA	1 mg/m3 TWA	None	None
Distillates (petroleum), hydrogenated heavy naphthenic	5 mg/m3 TWA (inhalable)	5 mg/m3 TWA	None	None
Distillates (petroleum), solvent-dewaxed heavy paraffinic	5 mg/m3 TWA (inhalable)	5 mg/m3 TWA	None	None
Graphite	5 mg/m3 TWA (respirable)	15 mg/m3 TWA (total dust) 5 mg/m3 TWA (respirable fraction)	None	None
Aluminum	1 mg/m3 TWA (respirable)	15 mg/m3 TWA (total dust) 5 mg/m3 TWA (respirable fraction)	None	None

- Engineering controls:** Use local ventilation to maintain worker exposure below established exposure limits.
- Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
- Skin protection:** Use chemical resistant/ impermeable gloves and protective clothing to prevent skin contact.
- Eye/face protection:** Safety goggles or safety glasses with side shields.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Silver-grey
<b>Odor:</b>	Mild petroleum
<b>Odor threshold:</b>	Not Available
<b>pH:</b>	Neutral
<b>Vapor pressure:</b>	Not available
<b>Boiling point/range:</b>	Not available
<b>Melting point/range:</b>	Not available
<b>Specific gravity:</b>	1.2
<b>Vapor density:</b>	Not available
<b>Flash point:</b>	>177°C (350°F)
<b>Flammable/Explosive limits – Lower:</b>	Not available
<b>Flammable/Explosive limits – Upper:</b>	Not available
<b>Autoignition Temperature:</b>	Not available
<b>Evaporation rate:</b>	Not available
<b>Solubility in water:</b>	Not soluble
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>VOC content:</b>	<0.2 %, 2 grams/liter (Estimated)

**10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable when stored under the recommended storage conditions
<b>Hazardous reactions:</b>	None under normal processing conditions. In the presence incompatible materials or high temperature polymerization may occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon.
<b>Incompatible materials:</b>	Concentrated oxygen.
<b>Conditions to avoid:</b>	Avoid strong oxidizing agents.

**11. TOXICOLOGICAL INFORMATION**

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

**Potential Health Effects/Symptoms**

<b>Inhalation:</b>	No adverse effects expected at ambient temperatures. Inhalation of vapors and fumes from thermal decomposition may cause respiratory irritation and metal fume fever with symptoms of fever and chills.
<b>Skin contact:</b>	Prolonged contact may cause irritation and drying of the skin.
<b>Eye contact:</b>	May cause mild eye irritation.
<b>Ingestion:</b>	May cause gastrointestinal tract irritation if swallowed.

Hazardous components	LD50	LC50	Immediate and Delayed Health Effects
Copper	Oral LD50 (Rat) = 2,500 mg/Kg Dermal LD50 (Rat) >2,000 mg/Kg	Inhalation LC50 (Rat) 5.11 mg/L	None
Distillates (petroleum), hydrogenated heavy naphthenic	Oral LD50 (Rat) = 5,000 mg/Kg Dermal LD50 (Rabbit) >2,000 mg/Kg	Inhalation LC50 (Rat) 2.18 mg/L	Irritant
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Oral LD50 (Rat) = 5,000 mg/Kg Dermal LD50 (Rabbit) >2,000 mg/Kg	Inhalation LC50 (Rat) 2.18 mg/L	Irritant
Graphite	Oral LD50 (Rat) = 2,000 mg/Kg	Inhalation LC50 (Rat) >2 mg/L	None Known
Aluminum	Oral LD50 (Rat) = 15,900 mg/Kg	Inhalation LC50 (Rat) >0.888 mg/L	None known

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Copper	No	No	No
Distillates (petroleum), hydrogenated heavy naphthenic	No	No	No
Distillates (petroleum), solvent-dewaxed heavy paraffinic	No	No	No
Graphite	No	No	No
Aluminum	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:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Exceptions:** None

**International Air Transportation (ICAO/IATA):**

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Exceptions:** None

**Water Transportation (IMO/IMDG):**

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Exceptions:** None

**Marine pollutant:**

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	None above the reporting limits.
<b>CERCLA/SARA Section 302 EHS:</b>	None above the reporting limits.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health, Fire, Reactive
<b>CERCLA/SARA 313:</b>	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Aluminum (CAS# 7429-90-5).
<b>CERCLA Reportable quantity:</b>	
<b>California Proposition 65:</b>	No chemical listed on the California Proposition 65 are known to be present.

### Canada Regulatory Information

<b>CEPA DSL/NDL Status:</b>	All components are listed on or are exempt from listing on the Domestic Substances List.
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## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous one: New format**

**Issue Date:** 05/05/15

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.