

## Preliminary Material Safety Data Sheet

### PERMABOND ANTI-SEIZE

Revision Number: 1

Issue date: 04/09/10

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** PERMABOND ANTI-SEIZE

Telephone: 732-868-1372

**Product type:** Lubricant

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

Emergency Telephone:  
Medical: 866-827-6282  
Transport: 1-800-640-7599  
Website: www.permabond.com

#### 2. HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

##### HMIS:

**Physical state:** Paste

**HEALTH:** 1

**Color:** Grey

**FLAMMABILITY:** 1

**Odor:** Mild

**PHYSICAL HAZARD:** 0

**Personal Protection:** See Section 8

**CAUTION:** MAY CAUSE EYE AND SKIN IRRITATION

**Relevant routes of exposure:** Skin and Eyes

##### Potential Health Effects

**Inhalation:** Under normal conditions of use it is not likely to irritate respiratory track because of its low volatility.

**Skin contact:** Prolonged or repeated contact may cause irritation.

**Eye contact:** Contact with eyes will cause irritation.

**Ingestion:** May cause gastrointestinal tract irritation, nausea, vomiting and diarrhea. The principal hazard of ingestion is aspiration of the material into the lungs which could lead to pneumonitis.

**Existing conditions aggravated by exposure:** Skin, eye and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**See Section 11 for additional toxicological information.**

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	CONCENTRATION (%)
Copper, as dust or fume	7440-50-8	20 – 30
Aluminum, as dust or fume	7429-90-5	5 – 8
Petroleum oil	64742-65-0	40 – 60

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Not likely under normal conditions of use. If using in high temperature applications where thermal decomposition is likely, use local exhaust to keep exposure to below exposure limits. If dizziness or irritation occurs, move to fresh air. If symptoms persist, get medical attention.
<b>Skin contact:</b>	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
<b>Eye contact:</b>	Flush with plenty of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Aspiration may cause pulmonary edema and pneumonitis. Keep individual calm and get medical attention. Never give anything by mouth to an unconscious person. Get medical attention.

### 5. FIRE-FIGHTING MEASURES

<b>Flash point:</b>	>176.7°C (350°F) C.O.C.
<b>Auto ignition temperature:</b>	Not available
<b>Flammable/Explosive limits-lower %:</b>	Not available
<b>Flammable/Explosive limits-upper %:</b>	Not available
<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special fire fighting procedures:</b>	This material will not burn unless it is pre-heated. Water fog maybe used to cool the container but do not spray directly into large containers of burning liquids as frothing may occur. Wear N.I.O.S.H. approved organic vapor respirator
<b>Unusual fire or explosion hazards:</b>	None expected. Dense smoke and noxious or toxic fumes maybe generated in a fire. Fire fighters should wear self contained breathing apparatus.
<b>Hazardous combustion products:</b>	Oxides of carbon. Irritating organic vapors.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:** Prevent product from entering drains or open waters.

**Clean-up methods:** Dispose in a responsible manner. Follow, local, state and federal guidelines for disposal. Scrape as much residue as possible and return to container. Clean residue with soap and water.

## 7. HANDLING AND STORAGE

**Handling:** Prevent contact with eyes, skin and clothing. Wash thoroughly after handling.

**Storage:** Keep in a cool well ventilated area. Store away from strong oxidizers, extreme heat, or open flames. For safe storage, store between 5°C and 25°C (41°F and 77°F) in unopened container.

**Incompatible products:** Refer to Section 10.

## 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/m <sup>3</sup> TWA (as Cu) Dust and mist. 0.2 mg/m <sup>3</sup> TWA fume.	1 mg/m <sup>3</sup> TWA (as Cu) Dust and mist. 0.1 mg/m <sup>3</sup> TWA fume	None	None
Aluminum	1 mg/m <sup>3</sup> TWA Respirable fraction	15 mg/m <sup>3</sup> TWA (as Al) Total dust and mist. 5 mg/m <sup>3</sup> TWA (as Al) Respirable dust	None	None
Petroleum oil	None	None	None	None

**Engineering controls:** No specific ventilation requirements noted, but forced ventilation may still be necessary if concentrations exceed established exposure limits; especially in high temperature applications.

<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
<b>Skin protection:</b>	Use impermeable gloves and protective clothing as necessary to prevent skin contact.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Gray
<b>Odor:</b>	Mild
<b>Odor Threshold:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>pH:</b>	Not available
<b>Boiling point/range:</b>	Greater than 371.1°C (700°F)
<b>Melting point/range:</b>	Not available
<b>Specific gravity:</b>	1.2
<b>Vapor density:</b>	Not available
<b>Flash Point:</b>	>176.7 °C (350°F)
<b>Flammable/Explosive Limits (lower)</b>	Not available
<b>Flammable/Explosive Limits (upper)</b>	Not Available
<b>Evaporation rate:</b>	0
<b>Solubility in water:</b>	Nil
<b>Partition coefficient (n-octanol/water):</b>	Not available
<b>VOC content:</b>	41.4 grams/liter

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Hazardous polymerization:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of nitrogen. Irritating vapors.
<b>Incompatibility:</b>	Strong oxidizing agents, strong acids, strong bases.
<b>Conditions to avoid:</b>	Heat. Keep away from incompatible materials

**11. TOXICOLOGICAL INFORMATION**

**Carcinogen Status**

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Copper	No	No	No
Aluminum, dust or fume	No	No	No
Petroleum oil	No	No	No

Hazardous components	Health Effects/Target Organs
Copper	Allergen, Blood, Central nervous system, Developmental, Gastrointestinal, Immune system, Kidney, Liver, Irritant, Mutagen, Sensory, Skin
Aluminum, dust or fume	Central nervous system, Lung, Immune system, Irritant
Petroleum oil	Allergen, irritant

**12. ECOLOGICAL INFORMATION**

**Ecological information:** Copper is considered a marine pollutant. It should not be

**13. DISPOSAL CONSIDERATIONS**

**Information provided is for unused product only.**

**Recommended method of disposal:** Dispose of according to Federal, State and local governmental regulations.

**EPA hazardous waste number:** Not a RCRA hazardous waste.

**14. TRANSPORT INFORMATION**

The shipment information in this section is for non-bulk packaging. Shipping classification might be different for bulk packaging.

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

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**DOT Reportable quantity:** Copper is reportable at 5000 lb (2700 Kg)  
**Marine Pollutant:** Copper

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

**Proper shipping name:** Unrestricted  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

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

<b>Proper shipping name:</b>	Environmentally hazardous substance, liquid, n.o.s. (copper)
<b>Hazard class or division:</b>	9
<b>Identification number:</b>	UN 3082
<b>Packing group:</b>	III
<b>Marine pollutant:</b>	Copper

**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 Hazard
<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). Copper (CAS# 7440-50-8) and Aluminum not powder, dust or fumes (CAS# 7429-90-5).
<b>California Proposition 65:</b>	This product does not contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**Canada Regulatory Information**

<b>CEPA DSL/NDL Status:</b>	All components are listed on or are exempt from listing on the Domestic Substances List.
<b>WHMIS hazard class:</b>	Not controlled

**16. OTHER INFORMATION**

This material safety data sheet contains changes from the previous on in sections: New Material Data Sheet format

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.