



## SAFETY DATA SHEET

### Permabond Cleaner A

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

**Product name** Permabond Cleaner A

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Cleaning agent.

##### 1.3. Details of the supplier of the safety data sheet

**Supplier** Permabond Engineering Adhesives Ltd.  
 Wessex Way  
 Colden Common  
 Winchester  
 Hampshire. SO21 1WP  
 United Kingdom  
 Tel: +44 (0)1962 711 661  
 Fax: +44 (0)1962 711 662  
 info.europe@permabond.com

##### 1.4. Emergency telephone number

**Emergency telephone** UK +44 (0)1962 711 661 USA 0800 640 7599 Asia +86 (0)21 5773 4913

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

**Physical hazards** Aerosol 1 - H222, H229  
**Health hazards** Skin Irrit. 2 - H315 STOT SE 3 - H336  
**Environmental hazards** Aquatic Chronic 2 - H411

**Classification (67/548/EEC or 1999/45/EC)** Xi;R38. F+;R12. N;R51/53. R67.

##### 2.2. Label elements

###### Pictogram



###### Signal word

Danger

###### Hazard statements

H222 Extremely flammable aerosol.  
 H229 Pressurised container: may burst if heated  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H411 Toxic to aquatic life with long lasting effects.

## Permabond Cleaner A

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P211 Do not spray on an open flame or other ignition source.</p> <p>P251 Do not pierce or burn, even after use.</p> <p>P280 Wear protective gloves, eye and face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p>
<b>Contains</b>	HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS
<b>Supplementary precautionary statements</b>	<p>P235+P410 Keep cool. Protect from sunlight.</p> <p>P261 Avoid breathing vapour/spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P273 Avoid release to the environment.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/attention.</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P391 Collect spillage.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</p> <p>P501 Dispose of contents/container in accordance with existing Community, National and local regulations.</p>

### 2.3. Other hazards

Contents under pressure. Avoid exposing aerosol containers to high temperatures or direct sunlight.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS		30-60%
CAS number: —		EC number: 927-510-4
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Flam. Liq. 2 - H225	Xn;R65. Xi;R38. F;R11. N;R51/53. R67.	
Skin Irrit. 2 - H315		
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		
trans-DICHLOROETHYLENE		1-5%
CAS number: 156-60-5		EC number: 205-860-2
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Flam. Liq. 2 - H225	F;R11 Xn;R20 R52/53	
Acute Tox. 4 - H332		
Aquatic Chronic 3 - H412		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

## Permabond Cleaner A

<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Drink a few glasses of water or milk. Do not induce vomiting. Get medical attention if any discomfort continues.
<b>Skin contact</b>	Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention promptly if symptoms occur after washing.

### 4.2. Most important symptoms and effects, both acute and delayed

<b>Inhalation</b>	Vapours may cause drowsiness and dizziness.
<b>Skin contact</b>	Causes skin irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Treat symptomatically. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
-----------------------------	---

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Foam, carbon dioxide or dry powder.
-------------------------------------	-------------------------------------

### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Oxides of carbon. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> .
-------------------------	---

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours. Avoid breathing fire gases or vapours.
<b>Special protective equipment for firefighters</b>	Wear self contained breathing apparatus and protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Eliminate all sources of ignition. Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation.
-----------------------------	---

### 6.2. Environmental precautions

<b>Environmental precautions</b>	Avoid the spillage or runoff entering drains, sewers or watercourses.
----------------------------------	---

### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Absorb in vermiculite, dry sand or earth and place into containers. Transfer to suitable, labelled containers for disposal.
--------------------------------	---

### 6.4. Reference to other sections

<b>Reference to other sections</b>	For personal protection, see Section 8. For waste disposal, see section 13.
------------------------------------	---

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

## Permabond Cleaner A

**Usage precautions** During application and drying, solvent vapours will be emitted. Use only in well-ventilated areas. Keep away from heat, sparks and open flame.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 7.3. Specific end use(s)

**Specific end use(s)** Activator.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield. Personal eye protection should conform to EN 166

#### Hand protection

Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should not be worn. Gloves should conform to EN 374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Other skin and body protection

Uniforms, coveralls, or a lab coat should be worn

#### Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use of good industrial hygiene practices is required.

#### Respiratory protection

Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Hydrocarbons.
<b>pH</b>	Not applicable.
<b>Melting point</b>	Not known.
<b>Initial boiling point and range</b>	45 -100°C
<b>Flash point</b>	~ -4°C
<b>Evaporation rate</b>	4.3
<b>Vapour pressure</b>	Not available.

## Permabond Cleaner A

Vapour density	Not available.
Relative density	0.7
Solubility(ies)	Insoluble in water.
Auto-ignition temperature	Not available.
Viscosity	≈0.7 mPa s @ 23°C

### 9.2. Other information

Other information	Not relevant.
-------------------	---------------

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
------------	---

### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
-----------	--

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	There are no known conditions that are likely to result in a hazardous situation.
------------------------------------	---

### 10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition.
---------------------	---

### 10.5. Incompatible materials

Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
--------------------	--

### 10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.
----------------------------------	--

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicological effects	The toxicological properties of this product have not been fully evaluated. Do not ingest or inhale. Avoid direct contact with skin or eyes.
-----------------------	--

### Acute toxicity - inhalation

#### Aspiration hazard

Aspiration hazard	Not applicable.
-------------------	-----------------

Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea.
------------	--

Skin contact	Irritating to skin. Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking.
--------------	---

Eye contact	Vapour or spray in the eyes may cause irritation and smarting.
-------------	--

### Toxicological information on ingredients.

HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS

## PermaBond Cleaner A

### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,840.0

Species Rat

ATE oral (mg/kg) 5,840.0

### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 2,800.0

Species Rat

ATE dermal (mg/kg) 2,800.0

### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 23.3

Species Rat

ATE inhalation (vapours mg/l) 23.3

## trans-DICHLOROETHYLENE

### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,000.1

Species Rat

ATE oral (mg/kg) 2,000.1

### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 5,000.0

Species Rabbit

ATE dermal (mg/kg) 5,000.0

### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> gases ppmV) 24,000.0

Species Rat

ATE inhalation (gases ppm) 4,500.0

## SECTION 12: Ecological Information

**Ecotoxicity** Toxic to aquatic life with long lasting effects. Avoid release to the environment.

### 12.1. Toxicity

**Toxicity** No data available.

## Permabond Cleaner A

### Ecological information on ingredients.

#### HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS

Acute toxicity - fish	LL <sub>50</sub> , 96 hours: > 13.4 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic plants	NOELR, 72 hours: 6.3 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	NOELR, 48 hours: 5.999 mg/l, Tetrahymena pyriformis
Chronic toxicity - fish early life stage	NOELR, 28 days: 1.534 mg/l, Onchorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 1 mg/l, Daphnia magna

#### trans-DICHLOROETHYLENE

Acute toxicity - aquatic invertebrates	NOEC, 48 hours: 110 mg/l, Daphnia magna LC <sub>50</sub> , 48 hours: 220 - 290 mg/l, Daphnia magna
--	---

### 12.2. Persistence and degradability

Persistence and degradability No data available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

### 12.4. Mobility in soil

Mobility The product contains organic solvents which will evaporate easily from all surfaces.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

Other adverse effects None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

General information	Waste disposal should be in accordance with existing Community, National and local regulations
Disposal methods	Empty containers must not be punctured or incinerated because of the risk of an explosion.
Waste class	16 05 04 gases in pressure containers (including halons) containing dangerous substances.

## SECTION 14: Transport information

### 14.1. UN number

1950

### 14.2. UN proper shipping name

Proper shipping name AEROSOLS, FLAMMABLE  
(ADR/RID)

## PermaBond Cleaner A

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS, FLAMMABLE

Proper shipping name (ADN) AEROSOLS

### 14.3. Transport hazard class(es)

ADR/RID class 2

IMDG class 2

ICAO class/division 2.1

### Transport labels



### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

EmS F-D, S-U

Tunnel restriction code (D)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Not relevant.

Annex II of MARPOL 73/78  
and the IBC Code

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>National regulations</b>	Petroleum (Consolidation) Act, as amended 1984 SI 1244.
	Highly Flammable Liquid Regulations 1972.
	Rivers (Prevention of Pollution) Act 1961.
	Control of Pollution (Special Waste) Regulations 1980 (as amended).
<b>EU legislation</b>	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40.
	Introduction to Local Exhaust Ventilation HS(G)37.
	CHIP for everyone HSG228.
	Approved Classification and Labelling Guide (Sixth edition) L131.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.



## Permabond Cleaner A

### SECTION 16: Other information

<b>Revision date</b>	20/05/2015
<b>Revision</b>	3
<b>Supersedes date</b>	18/12/2014
<b>Risk phrases in full</b>	R11 Highly flammable. R12 Extremely flammable. R20 Harmful by inhalation. R38 Irritating to skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.
<b>Hazard statements in full</b>	H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H229 Pressurised container: may burst if heated H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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.