SAFETY DATA SHEET
Permabond ASC10

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

1.1. Product identifier

Product name Permabond ASC10

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

Identified uses Primer.

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 (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

Human health In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Irritating to eyes. Repeated exposure may cause skin dryness or cracking.

Environmental Toxic to aquatic life with long lasting effects.

Physicochemical The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

2.2. Label elements

Pictogram

Permabond ASC10

Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352a IF ON SKIN: Wash with plenty of soap and water P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P331 Do NOT induce vomiting.
Contains	HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS
Supplementary precautionary statements	P243 Take precautionary measures against static discharge. 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. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/container in accordance with existing Community, National and local regulations.

2.3. Other hazards

None under normal conditions.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS **60-100%**

CAS number: — EC number: 927-510-4

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	Xn;R65. Xi;R38. F;R11. N;R51/53. R67.

Permabond ASC10

trans-DICHLOROETHYLENE		**5-10%**
CAS number: 156-60-5	EC number: 205-860-2	

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Aquatic Chronic 3 - H412	F;R11 Xn;R20 R52/53

N,N-DIMETHYL-PARA-TOLUIDINE		**<1%**
CAS number: 99-97-8	EC number: 202-805-4	

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT RE 2 - H373 Aquatic Chronic 3 - H412	T;R23/24/25 R33 R52/53

2-ETHYLHEXANOIC ACID, COPPER SALT		**<1%**
CAS number: 22221-10-9	EC number: 244-846-0	
M factor (Acute) = 1	M factor (Chronic) = 1	

Classification	**Classification (67/548/EEC or 1999/45/EC)**
Acute Tox. 4 - H302 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Xn;R22. N;R50/53.

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

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Drink a few glasses of water or milk. Do not induce vomiting. Get medical attention.

Skin contact Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Inhalation Vapours may cause drowsiness and dizziness.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

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

Permabond ASC10

Notes for the doctor Avoid vomiting and stomach flushing because of the risk of aspiration.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards The product is flammable. Heating may generate flammable vapours. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

Hazardous combustion products Burning produces irritating, toxic and obnoxious fumes. Carbon monoxide, carbon dioxide, and unknown hydrocarbons.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water.

Special protective equipment for firefighters Wear self contained breathing apparatus and protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Remove or isolate all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. During application and drying, solvent vapours will be emitted. Use in a well ventilated area. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from sources of ignition - No smoking.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) Primer.

Permabond ASC10

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.
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	Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower. Uniforms, coveralls, or a lab coat should be worn
Hygiene measures	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	Not normally required.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green.
Odour	aromatic hydrocarbons
pH	Not applicable.
Melting point	Not known.
Initial boiling point and range	45-100°C
Flash point	~4°C
Evaporation rate	4.3
Upper/lower flammability or explosive limits	Not available. Not known.
Vapour pressure	Not available.
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

Permabond ASC10

Explosive properties Not known.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong oxidising agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions There are no known reactivity hazards associated with this product.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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.

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating.

Aspiration hazard

Aspiration hazard Aspiration hazard if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Inhalation In high concentrations, vapours may irritate throat and respiratory system and cause coughing. Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating and may cause redness and pain.

Toxicological information on ingredients.

HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 5,840.0

Permabond ASC10

Species	Rat
ATE oral (mg/kg)	5,840.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	2,800.0
Species	Rat
ATE dermal (mg/kg)	2,800.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	23.3
Species	Rat
ATE inhalation (vapours mg/l)	23.3

trans-DICHLOROETHYLENE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	2,000.1
Species	Rat
ATE oral (mg/kg)	2,000.1
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
ATE dermal (mg/kg)	5,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} gases ppmV)	24,000.0
Species	Rat
ATE inhalation (gases ppm)	4,500.0

N,N-DIMETHYL-PARA-TOLUIDINE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	139.0
Species	Mouse
ATE oral (mg/kg)	100.0
Acute toxicity - dermal	

Permabond ASC10

Acute toxicity dermal (LD_{50} mg/kg)	212.0
Species	Mouse
ATE dermal (mg/kg)	300.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	3.19
Species	Mouse
ATE inhalation (vapours mg/l)	3.19

Skin corrosion/irritation

Animal data	Moderately irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Moderately irritating.

Germ cell mutagenicity

Genotoxicity - in vitro	Ames test This substance has no evidence of mutagenic properties.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological Information

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Ecological information on ingredients.

HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS

Acute toxicity - fish	LL_{50}, 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_{50}, 48 hours: 220 - 290 mg/l, Daphnia magna

N,N-DIMETHYL-PARA-TOLUIDINE

Permabond ASC10

Acute toxicity - fish	LC_{50}, 96 hours: 46 mg/l, Pimephales promelas (Fat-head Minnow)

2-ETHYLHEXANOIC ACID, COPPER SALT

Acute aquatic toxicity	
LE(C)$_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Chronic aquatic toxicity	
M factor (Chronic)	1

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 Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

Disposal methods Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.

Waste class 14 06 03 other solvents and solvent mixtures

SECTION 14: Transport information

14.1. UN number

1993

14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7, n-Alkanes, isoalkanes,cyclics)

14.3. Transport hazard class(es)

3

Transport labels

Permabond ASC10

14.4. Packing group

II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

EmS	F-E, S-E
Emergency Action Code	3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). EH40/2005 Workplace exposure limits.
EU legislation	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).
Guidance	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	27/01/2016
Revision	2
Supersedes date	31/08/2012

Permabond ASC10

Risk phrases in full

R10 Flammable.
R11 Highly flammable.
R20 Harmful by inhalation.
R22 Harmful if swallowed.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R33 Danger of cumulative effects.
R38 Irritating to skin.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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.

Hazard statements in full

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.