

SAFETY DATA SHEET

Page 1 of 4

Permabond 2011

Revision 3
Revision date 28-Jan-2008

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product name Permabond 2011
Company Permabond Engineering Adhesives Ltd
Wessex Business Park
Wessex Way
Colden Common
Hampshire
SO21 1WP
United Kingdom
Telephone +44 (0)1962 711661
Fax +44 (0)1962 711662
Intended use Adhesives.

2 HAZARDS IDENTIFICATION.

Main hazards Irritating to eyes, respiratory system and skin.
Skin contact On contact, immediate bonding of the skin will occur.
Eye contact On contact, will bond eyelids together. Vapours are lachrymatory.
Ingestion On contact, immediate bonding of mouth could occur.

3 . COMPOSITION / INFORMATION ON INGREDIENTS.

Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Ethyl-2-cyanoacrylate (Ethyl cyanoacrylate)	50-100%	7085-85-0	230-391-5	Xi; R36/37/38

4. FIRST AID MEASURES

Skin contact No attempt should be made to remove material from skin or to remove contaminated clothing, as the bonded skin can be easily torn. If symptoms develop, obtain medical attention.
Eye contact Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention. Cured adhesive will not bond well to surface of eye, but corneal damage from abrasion may result.
Inhalation Move the exposed person to fresh air. Get medical attention if irritation persists.
Ingestion Immediate medical attention is required. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Extinguishing media Carbon dioxide (CO₂) , dry chemical.
Fire hazards Cloths used to wipe up spills may cause rapid polymerization that could generate sufficient heat to ignite the cloth. Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide, carbon dioxide, and hydrogen cyanide.
Protective equipment Wear: Self-contained breathing apparatus.

Permabond 2011

Revision 3
Revision date 28-Jan-2008

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation of the working area. Wear suitable protective equipment.
Environmental precautions	No environmental requirements.
Clean up methods	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. Wear approved respirator for organic vapours if needed, and protective clothing.

7. HANDLING AND STORAGE

Handling	Always replace cap after use.
Storage	Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Ethyl-2-cyanoacrylate (Ethyl cyanoacrylate)	WEL 8-hr limit ppm: - WEL 15 min limit ppm: 0.3	WEL 8-hr limit mg/m3: - WEL 15 min limit mg/m3: 1.5
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Engineering measures	Normal (mechanical) room ventilation should be adequate for small volumes. For higher volume activities, or if needed for worker comfort, local mechanical exhaust should be provided.
Respiratory protection	Not normally required.
Hand protection	Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should not be worn. Gloves should conform to EN 374.
Eye protection	Safety glasses, goggles or face shield to protect against splashing. Personal eye protection should conform to EN 166
Protective equipment	Uniforms, coveralls, or a lab coat should be worn. Wash hands before eating, drinking, or using toilet facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description	Gel.
Colour	Colourless.
Odour	Pungent.
Boiling point	>200°C
Flash point	83°C
Vapour pressure	<5mm Hg
Relative density	1.08
Viscosity	~70000 mPa.s
Vapour density	>1

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to avoid	Direct sunlight. Heat.
Materials to avoid	Water. Amines. Bases. Peroxides.
Hazardous decomposition products	Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide, carbon dioxide, and hydrogen cyanide.

Permabond 2011

Revision 3
Revision date 28-Jan-2008

11. TOXICOLOGICAL INFORMATION

Corrosivity	Irritating to eyes, respiratory system and skin.
Sensitization	Under EU legislation the cyanoacrylates do not require classification as sensitisers and the rapid polymerisation caused on contact with moisture makes this unlikely. However the American Conference of Governmental Industrial Hygienists (ACGIH) has reported some limited evidence of skin and respiratory sensitisation. May cause allergic reactions in susceptible people.
Mutagenic effects	None known .
Carcinogenic effects	None known .

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data is available on this product.
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13. DISPOSAL CONSIDERATIONS

General information	Waste disposal should be in accordance with existing Community, National and local regulations.
Disposal of packaging	Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

14. TRANSPORT INFORMATION

ADR/RID

UN 3334	Packing group -
Class 9	Hazard ID -
Proper Shipping AVIATION REGULATED	
Name LIQUID, N.O.S, (Contains Ethyl Cyanoacrylate; applies only to inner containers >1 litre).	


IMDG

UN 3334	Packing group -
Class 9	Marine pollutant NO
EmS Code -	

IATA

UN 3334	Packing group -
Class 9	Subsidiary risk -
Packing Instruction 906	Maximum quantity 220 L
(Cargo)	
Packing Instruction 906	Maximum quantity 100 L
(Passenger)	

15. REGULATORY INFORMATION

Labelling	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Symbols	Xi - Irritant 
Risk phrases	R36/37/38 - Irritating to eyes, respiratory system and skin.
Safety phrases	S23 - Do not breathe gas/fumes/vapour/spray. S24/25 - Avoid contact with skin and eyes. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Permabond 2011

Revision 3
Revision date 28-Jan-2008

16. OTHER INFORMATION

Text of risk phrases in Section 3. R36/37/38 - Irritating to eyes, respiratory system and skin.

Further information

Directives 1999/45/EC and 91/155/EEC have been considered when compiling this SDS. The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process. Reference should be made to any relevant local or national health, safety, and environmental legislation. This information does not constitute indication of suitability for specific uses.

Revision

This document differs from the previous version in the following areas:

14 - aDR/RID.

14 - iMDG.

14 - iATA.