



SAFETY DATA SHEET
Permabond C Surface Activator - Aerosol

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Permabond C Surface Activator - Aerosol

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

Identified uses Activator. 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

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 (1999/45/EEC) Xi;R38. F+;R12. N;R51/53. R67.

2.2. Label elements

Labelling



Irritant



Extremely flammable



Dangerous for the environment

Risk Phrases

| | |
|--------|---|
| R12 | Extremely flammable. |
| R38 | Irritating to skin. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R67 | Vapours may cause drowsiness and dizziness. |

Safety Phrases

| | |
|-----|---|
| A1 | Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. |
| A2 | Do not spray on a naked flame or any incandescent material. |
| S2 | Keep out of the reach of children. |
| S9 | Keep container in a well-ventilated place. |
| S16 | Keep away from sources of ignition - No smoking. |
| S23 | Do not breathe vapour/spray. |
| S51 | Use only in well-ventilated areas. |

2.3. Other hazards

None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Permabond C Surface Activator - Aerosol

| | | |
|--|--|--------------------------|
| BUTANE | | 10-30% |
| CAS-No.: 106-97-8 | | EC No.: 203-448-7 |
| Classification (EC 1272/2008) Flam. Gas 1 - H220 | Classification (67/548/EEC) F+;R12 | |
| HYDROCARBONS, C7, n-ALKANES, ISOALKANES, CYCLICS | | 30-60% |
| CAS-No.: | | EC No.: 927-510-4 |
| Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411 | Classification (67/548/EEC) Xn;R65. Xi;R38. F;R11. N;R51/53. R67. | |
| N,N-DIMETHYL-PARA-TOLUIDINE | | 0.1-1% |
| CAS-No.: 99-97-8 | | EC No.: 202-805-4 |
| Classification (EC 1272/2008) Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT RE 2 - H373 Aquatic Chronic 3 - H412 | Classification (67/548/EEC) T;R23/24/25 R33 R52/53 | |
| trans-DICHLOROETHYLENE | | 1-5% |
| CAS-No.: 156-60-5 | | EC No.: 205-860-2 |
| Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Aquatic Chronic 3 - H412 | Classification (67/548/EEC) F;R11 Xn;R20 R52/53 | |

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

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly. Drink a few glasses of water or milk. DO NOT INDUCE VOMITING! Get medical attention if any discomfort continues.

Skin contact

Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Immediately flush with plenty of water or eyewash solution for up to 10 minutes. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.

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

Inhalation.

Vapours may cause drowsiness and dizziness.

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

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Treat Symptomatically. General first aid, rest, warmth and fresh air.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

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

Specific hazards

Aerosol containers can explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Special Fire Fighting Procedures

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 vapours.

Protective equipment for fire-fighters

Wear self contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Eliminate all sources of ignition. Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and 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

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

During application and drying, solvent vapours will be emitted. Keep away from heat, sparks and open flame. Provide good ventilation.

Repeated or prolonged exposure may cause dermatitis and skin irritation, due to the degreasing properties of the product.

7.2. Conditions for safe storage, including any incompatibilities

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 sources of ignition - No smoking.

7.3. Specific end use(s)

Activator.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Name | STD | TWA - 8 Hrs | | STEL - 15 Min | | Notes |
|--------|-----|-------------|------------------------|---------------|------------------------|-------|
| BUTANE | WEL | 600 ppm | 1450 mg/m ³ | 750 ppm | 1810 mg/m ³ | Carc |

WEL = Workplace Exposure Limit.

Carc = Capable of causing cancer and/or heritable genetic damage.

Ingredient Comments

The Butane used in this formulation contains less than <0.1% Buta-1, 3-diene

8.2. Exposure controls

Engineering measures

Provide sufficient ventilation during operations which cause vapour formation.

Respiratory equipment

Respiratory protection must be used if air contamination exceeds acceptable level.

Hand protection

Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent™ gloves should not be worn. Gloves should conform to EN 374.

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Eye protection

Use approved safety goggles or face shield. Personal eye protection should conform to EN 166

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.

Skin protection

Uniforms, coveralls, or a lab coat should be worn

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|--|-----------------------|
| Appearance | Liquid |
| Colour | Colourless. |
| Odour | Organic solvents. |
| Solubility | Immiscible with water |
| Initial boiling point and boiling range | 45 - 100°C |
| Melting point (°C) | Not available. |
| Relative density | 0.7 |
| Vapour density (air=1) | Not available. |
| Vapour pressure | Not available. |
| Evaporation rate | Not available. |
| pH-Value, Conc. Solution | Not relevant |
| Viscosity | ~0.7 mPas |
| Decomposition temperature (°C) | Not determined. |
| Odour Threshold, Lower | Not determined. |
| Flash point | ~ -26°C |
| Auto Ignition Temperature (°C) | Not available. |
| Explosive properties | Not determined. |
| Oxidising properties | Not applicable. |

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Exothermic reaction with: Cyanoacrylate adhesives

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

No specific conditions are likely to result in a hazardous situation.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

No incompatible groups noted.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

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11.1. Information on toxicological effects

Aspiration hazard:

Not relevant, due to the form of the product.

Inhalation

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

Skin contact

Product has a defatting effect on skin. Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritating to eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.2. 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

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste disposal should be in accordance with existing Community, National and local regulations

13.1. Waste treatment methods

Empty containers must not be burned because of explosion hazard.

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

AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

| | |
|---------------------|-----|
| ADR/RID/ADN Class | 2 |
| IMDG Class | 2 |
| ICAO Class/Division | 2.1 |

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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

Not relevant

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

Petroleum (Consolidation) Act, as amended 1984 SI 1244. Highly Flammable Liquid Regulations 1972.

Environmental Listing

Rivers (Prevention of Pollution) Act 1961. Control of Pollution (Special Waste Regulations) Act 1980.

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

| | |
|-----------------|------------|
| Revision Date | 26/04/2012 |
| Revision | 3 |
| Supersedes date | 03/04/2012 |

Permabond C Surface Activator - Aerosol

Risk Phrases In Full

| | |
|-----------|---|
| R33 | Danger of cumulative effects. |
| R12 | Extremely flammable. |
| R20 | Harmful by inhalation. |
| R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R11 | Highly flammable |
| R38 | Irritating to skin. |
| R23/24/25 | Toxic by inhalation, in contact with skin and if swallowed. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R67 | Vapours may cause drowsiness and dizziness. |

Hazard Statements In Full

| | |
|------|---|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H301 | Toxic 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 <<Organs>> through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |