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

1.1. Product identifier

Product name
Permabond Initiator 41

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

Identified uses
Activator.

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 +66 (0)21 5773 4913

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards
Not Classified

Health hazards
Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Environmental hazards
Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC)

Xn;R21/22. Xi;R36/37/38.

2.2. Label elements

Pictogram

Signal word
Warning

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.
Permabond Initiator 41

Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P302+P352a IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/ attention.

Contains

3,5-DIETHYL-1,2-DIHYDRO-1-PHENYL-2-PROPYLPYRIDINE

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P305+P313 If skin irritation occurs: Get medical advice/ attention.
P305+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
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

<table>
<thead>
<tr>
<th>3,5-DIETHYL-1,2-DIHYDRO-1-PHENYL-2-PROPYLPYRIDINE</th>
<th>10-30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 34562-31-7</td>
<td>EC number: 252-091-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2-ETHYLHEXANOIC ACID, COPPER SALT</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 22221-10-9</td>
<td>EC number: 244-846-0</td>
</tr>
<tr>
<td>M factor (Acute) = 1</td>
<td>M factor (Chronic) = 1</td>
</tr>
</tbody>
</table>

Classification

Acute Tox. 4 - H302
Acute Tox. 4 - H312
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

Classification (67/548/EEC or 1999/45/EC)

Xn;R21/22. Xi;R36/38.

Classification

Acute Tox. 4 - H302
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC)

Xn;R22. N;R50/53.

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. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly with water. DO NOT induce vomiting. Get medical attention immediately.
Permabond Initiator 41

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact
Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of water while lifting the eye lids. 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

Ingestion
Harmful if swallowed. May cause stomach pain or vomiting.

Skin contact
Skin irritation.

Eye contact
Irritating and may cause redness and pain.

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

Notes for the doctor
No specific recommendations. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Extinguish with 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

Hazardous combustion products
Burning produces irritating, toxic and obnoxious fumes. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx).

5.3. Advice for firefighters

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.

6.2. Environmental precautions

Environmental precautions
Not considered to be a significant hazard due to the small quantities used. Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
Absorb spillage with sand or other inert absorbent. 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
Avoid contact with skin and eyes. Avoid eating, drinking and smoking when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store in closed original container at temperatures between 5°C and 25°C. Never return unused material to storage receptacle.
Permabond Initiator 41

7.3. Specific end use(s)
Specific end use(s) Adhesive. Activator.

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.

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

Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Use of good industrial hygiene practices is required.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

Colour

Brown.

Odour

Aromatic.

Odour threshold

Not determined.

pH

Not relevant.

Melting point

Not determined.

Initial boiling point and range

Not determined.

Flash point

90°C

Evaporation rate

Not available.

Upper/lower flammability or explosive limits

Not available.

Vapour pressure

Not available.

Vapour density

Not available.

Relative density

1.0

Solubility(ies)

Insoluble in water. Soluble in the following materials: Organic solvents.
Permabond Initiator 41

Auto-ignition temperature  Not determined.
Decomposition Temperature  Not available.
Viscosity  \( \approx 10 \text{ mPa s} @ 23^\circ\text{C} \)
Explosive properties  Not available.
Oxidising properties  Not available.

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 reactivity hazards associated with this product.

10.4. Conditions to avoid
Conditions to avoid  Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials
Materials to avoid  Strong acids. Strong oxidising agents.

10.6. Hazardous decomposition products
Hazardous decomposition products  Decomposes upon heating to release toxic fumes of nitrogen oxides, carbon monoxide, carbon dioxide, and hydrogen cyanide.

SECTION 11: Toxicological information

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

Aspiration hazard
Aspiration hazard  Based on available data the classification criteria are not met.

Inhalation  Vapour may irritate respiratory system/lungs.
Ingestion  Harmful if swallowed.
Skin contact  Irritating to skin.
Eye contact  Irritating to eyes.

SECTION 12: Ecological Information

Ecotoxicity  Harmful to aquatic life with long lasting effects.

12.1. Toxicity
Toxicity  No data available.
Permabond Initiator 41

Ecological information on ingredients.

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
No data available.

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
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Waste class
08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances.

SECTION 14: Transport information

General
The product is not classified as dangerous for carriage.

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.
Permabond Initiator 41

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

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

EU legislation

Guidance
Workplace Exposure Limits EH40.
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.

SECTION 16: Other information

Revision date 29/01/2016
Revision 4
Supersedes date 13/05/2015

Risk phrases in full
R21/22 Harmful in contact with skin and if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.

Hazard statements in full
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very 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.