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

- **1.1 Product identifier**
  - Trade name: PGB Power Grab 'n' Bond - TRIBRID® Technology
- **Article number:** PGB 535006
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the preparation** Sealant / Adhesive
- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** C-Tec N.I Limited
    Unit 6 Ashtree Enterprise Park,
    Rathfriland Road, Newry, Co.Down,
    N. Ireland, BT34 1BY.
  - **Email:** info@ct1.com
  - **Website:** www.ct1.com
  - **Further information obtainable from:**
    Product safety department.
    msds@ct1.com
  - **1.4 Emergency telephone number:**
    Tel: +44(0)28 3083 4892 (Monday – Friday 9am – 5pm)
    UK: NPIS National Poisons Information Centre Tel: +44(0)344 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- **Classification according to Regulation (EC) No 1272/2008 [CLP].**
  This mixture does not meet the criteria for classification in accordance with regulation (EC) No 1272/2008 [CLP].

2.2 Label elements
- **Signal word:** Not applicable
- **Hazard statements**
  - Precautionary Statements – Prevention;
    Not applicable
  - Precautionary Statements – Response;
    Not applicable
- **Additional information:** Not applicable

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization: Mixtures
- **Description:** Homogeneous mixture of tribrid polymer, plasticiser, filler and ancillaries.

Hazardous components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Reg.nr.</th>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2768-02-7</td>
<td>220-449-8</td>
<td>01-2119513215-52-xxxx</td>
<td>Trimethoxyvinylsilane</td>
<td>&lt;2.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Flam. Liq. 3 H226; Acute Tox. 4 H332;</td>
<td></td>
</tr>
</tbody>
</table>

**Additional information:** For the wording of the listed Hazard (H) / Precautionary (P) phrases refer to section 16.
PGB Power Grab 'n' Bond - TRIBRID® Technology

SECTION 4: First aid measures

· 4.1 Description of first aid measures
  · After inhalation: Supply fresh air.
  · After skin contact: Wash with plenty of soap and water for 10-15 minutes. Seek medical advice in case of irritation.
  · After eye contact: Rinse immediately with plenty of water. Seek medical advice in case of irritation.
  · After swallowing: Give several small portions of water to drink. Do not induce vomiting.

· 4.2 Most important symptoms and effects, both acute and delayed
  No further data available.

· 4.3 Indication of any immediate medical attention and special treatment needed
  Further toxicology information is available in SECTION 11.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
  · Suitable extinguishing agents: Water mist, dry powder, alcohol-resistant foam, carbon dioxide or sand.
  · Unsuitable extinguishing agents: Water spray or water jet.

· 5.2 Special hazards arising from the substance or mixture
  · Hazardous combustion products: Nitrous gases

· 5.3 Advice for firefighters
  · Protective equipment: Use respiratory protection independent of recirculated air.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  · 6.1.1. For non-emergency personnel.
    Protective equipment: Wear personal protective equipment (see SECTION 8).
    Emergency procedures: Keep unprotected persons away. Avoid contact with skin and eyes. Avoid inhaling mists and vapours.

· 6.2 Environmental precautions: Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers.

· 6.3 Methods and material for containment and cleaning up:
  · 6.3.1. For containment: Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner.
  · 6.3.2. For cleaning up: No further data available.
  · 6.3.3. Other information:

· 6.4 Reference to other sections
  See SECTION 8 and 13.
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SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Measures to prevent fire: Product can evolve methanol. Flammable vapours may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging.

Measures to prevent aerosol and dust generation: Not required.

Measures to protect the environment: No further data available.

· 7.2 Conditions for safe storage, including any incompatibilities:

Protect against moisture. Store in original container only. Keep container tightly closed and store in a cool, well ventilated place.

· 7.3 Specific end use(s) Cartridge Applied Sealant & Adhesive.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Maximum airborne concentrations at the workplace:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>Type</th>
<th>Mg/m3</th>
<th>ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>OEL</td>
<td>266</td>
<td>200</td>
</tr>
</tbody>
</table>

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· 8.2.1. Appropriate engineering controls: Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating.

· 8.2.2. Personal protection equipment

· 8.2.2.1. Eye face protection: Protective goggles.

· 8.2.2.2. Skin protection: After handling; make sure the skin is cleaned and protected.

· 8.2.2.3. Respiratory protection: In case of strong exposure: gas mask filter AX

· 8.2.2.4. Thermal hazards: Not applicable

· 8.2.3. Environmental exposure controls: Prevent material from entering surface waters or soil.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties.

<table>
<thead>
<tr>
<th>· Appearance:</th>
<th>Paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Odour:</td>
<td>Characteristic / low.</td>
</tr>
<tr>
<td>· Odour Threshold:</td>
<td>No data available.</td>
</tr>
<tr>
<td>· pH:</td>
<td>No data available.</td>
</tr>
<tr>
<td>· Melting point / freezing point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>· Initial boiling point and boiling range:</td>
<td>No data available.</td>
</tr>
<tr>
<td>· Flash point:</td>
<td>&gt;200°C</td>
</tr>
<tr>
<td>· Evaporation rate:</td>
<td>No data available.</td>
</tr>
<tr>
<td>· Flammability (solid, gas):</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
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(Contd. of page 3)

- Upper / lower flammability or explosive limits: No data available.
- Vapour pressure: No data available.
- Vapour density: No data available.
- Relative Density: 1.64 Kg/Ltr (water =1)
- Solubility (ies) (water): No data available.
- Partition coefficient: n-octanol / water: No data available.
- Auto-ignition temperature: No data available.
- Decomposition temperature: No data available.
- Viscosity: No data available.
- Explosive properties: No data available.
- Oxidising properties: None

SECTION 10: Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability: Stable when stored in sealed containers.
- 10.3 Possibility of hazardous reactions: Reacts with water and moisture in air, liberating methanol
- 10.4 Conditions to avoid: Moisture during storage.
- 10.5 Incompatible materials: Oxidising agents, peroxides, alcohols, acids, moisture, water
- 10.6 Hazardous decomposition products: Methanol.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects: Trimethoxyvinylsilane
- Acute toxicity
  LC50 (RT F/M 4h): 16.8 mg/l vapour
- Repeated dose toxicity
  NOAEL(RT F/M oral): <62.5 mg/kg, OECD 422, LOAEL(RT F/M oral): 62.5 mg/kg, NOAEL (RT F/M inhalation, vapour): 0.0605 mg/l
- Skin corrosion/irritation: Occluded (Dermal, RB, 24h) not irritating
- Serious eye damage / eye irritation: OECD 405 (RB 24h) not irritating
- Respiratory / skin sensitising: OECD 406 (GP) not a skin sensitisier
- Germ cell mutagenicity
- Reproductivity: Fertility: RT (F ingestion): NOAEL (parent): 250 mg/kg, NOAEL (F1): none, NOAEL (F2): none, Method: OECD 422
- Developmental toxicity: Teratogenicity: RT (inhalation – vapour): NOAEL (terato): 0.6 mg/l, NOAEL (mater): 0.15 mg/l. Method: according to standardised method.
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SECTION 12: Ecological information

12.1. Toxicity:

<table>
<thead>
<tr>
<th>Trimethoxyvinylsilane</th>
<th>Acute toxicity: Fish LC 50 (Oncorhynchus mykiss, 96h): 191 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aquatic invertebrates: EC 50 (Water flea (Daphnia magna) 48h): 168.7 mg/l</td>
</tr>
<tr>
<td></td>
<td>Aquatic plants: EC 50 (Algae (Pseudokirchneriella subcapitata), 7 d): 210 mg/l</td>
</tr>
<tr>
<td></td>
<td>EC 10 (Algae (Pseudokirchneriella subcapitata), 7 d): 25 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability: (Trimethoxyvinylsilane) 51 % (28 d, OECD 301 F) The product is not readily biodegradable.

12.3. Bioaccumulative potential: No data available

12.4. Mobility in soil: No data available

12.5. Results of PBT and vPvB testing: No data available

12.6. Other adverse effects: Not known

12.7. Additional information: Do not discharge into the drains or waterways.

SECTION 13: Disposal considerations


13.1.1. Product / packaging disposal:

Waste codes / waste designations according to LoW:
Dispense of in accordance with local regulations. Do not empty product into drains. According to the European catalogue, waste codes are not product specific, but application specific. The user should assign waste codes, preferably in discussion with the waste disposal authorities.

13.1.2. Waste treatment-relevant information: No data available.

13.1.3. Sewage disposal-relevant information: No data available.

13.1.4. Other disposal recommendations: No data available.

SECTION 14: Transport information

14.1 UN-Number
ADR, ADN, IMDG, ICAO/IATA, RID Not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, ICAO/IATA, RID Not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, ICAO/IATA, RID Not regulated

14.4 Packing group
ADR, ADN, IMDG, ICAO/IATA, RID Not regulated

14.5 Environmental hazards: Not regulated

14.6 Special precautions for user Not regulated

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code Not regulated
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SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  The product has been assessed in accordance with CLP.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant Hazard (H) and Precautionary (P) phrases
  H226: Flammable liquid and vapour.
  H332: Harmful if inhaled.

· Department issuing MSDS: Product safety department.

· Contact: msds@ct1.com

· Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
  IMDG: International Maritime Code for Dangerous Goods
  ICAO: International Civil Aviation Organization
  IATA: International Air Transport Association
  RID - Regulation concerning the International Carriage of Dangerous Goods by Rail.
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
  CAS - Chemical Abstracts Service number.
  PBT - Persistent, Bioaccumulative and Toxic substance.
  VPvB - Very Persistent and Very Bioaccumulative.
  UN - United Nations.