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

1.1 Product identifier
   GHS Product Identifier
   Bare Conductive Paint
   Water-based dispersion of carbon pigment in Natural resin
   Chemical Name
   Other names
   CAS No.
   EINECS No.
   Mixture - Not applicable
   Mixture - Not applicable

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Identified use(s)
   Electrically conductive paint
   Uses advised against
   Direct skin contact

1.3 Details of the supplier of the safety data sheet
   Company Identification
   Bare Conductive Limited
   Old Truman Brewery
   91 Brick Lane
   London E1 6QL
   Telephone
   +44 (0)20 3432 5385
   E-Mail (competent person)
   info@bareconductive.com

1.4 Emergency telephone number
   Emergency Phone No.
   +44 (0)20 3432 5385 – Technical manager

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Regulation (EC) No. 1272/2008 (CLP)

2.1.2 Directives 1999/45/EC
   Preparation is not classified as hazardous according to Directives 1999/45/EC.

2.2 Label elements
   2.2.1 Label elements
   According to Regulation (EC) No. 1272/2008 (CLP)
   Not applicable.

2.2.2 Label elements
   According to Directive 1999/45/EC
   Contains Diazolidinyl urea. May cause an allergic reaction
   Hazard Symbol
   Not applicable.
   Risk Phrases
   Not applicable.
   Safety Phrases
   Not applicable.

2.3 Other hazards

2.4 Additional Information
3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
EC Classification No. 1272/2008

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resin</td>
<td></td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Conductive carbon</td>
<td></td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Humectant</td>
<td></td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Diazolidinyl urea</td>
<td>0.1-1</td>
<td>78491-02-8</td>
<td>278-928-2</td>
<td>H317 Skin Sens. 1</td>
</tr>
<tr>
<td>Processing aids and preservatives</td>
<td>2-4</td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Individual levels below 1% do not give rise to classification</td>
</tr>
</tbody>
</table>

EC Classification No. 67/548/EEC

<table>
<thead>
<tr>
<th>Hazardous ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Classification and Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resin</td>
<td></td>
<td>Trade secret</td>
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<tr>
<td>Diazolidinyl urea</td>
<td>0.1-1</td>
<td>78491-02-8</td>
<td>278-928-2</td>
<td>R43: May cause sensitization by skin contact.</td>
</tr>
<tr>
<td>Processing aids and preservatives</td>
<td>2-4</td>
<td>Trade secret</td>
<td>Trade secret</td>
<td>Individual levels below 1% do not give rise to classification</td>
</tr>
</tbody>
</table>

3.2 Additional Information
For full text of R/H/P phrases see section 16.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove patient from exposure. Give oxygen if breathing difficult. Apply artificial respiration if necessary. Obtain medical attention if ill effects occur.

Skin Contact: Wash affected skin with plenty of soap and water. Remove contaminated clothing and wash before reuse. Obtain medical attention if ill effects occur.

Eye Contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Unlikely to cause harmful effects under normal conditions of handling and use.

4.3 Indication of the immediate medical attention

Allergic reaction, Increased difficulty in breathing.

Revision: 1 Bare Conductive Paint
Page: 2/6 Date: 27 September 2011
and special treatment needed

5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing Media As appropriate for surrounding fire.
Unsuitable Extinguishing Media As appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture
Combustion or thermal decomposition will evolve toxic and irritant vapours (Nitrogen oxides)

5.3 Advice for fire-fighters
Self-contained breathing apparatus to be worn if involved in fire. Water spray should be used to cool containers.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Put on protective clothing.

6.2 Environmental precautions
Do not allow to enter drains, sewers or watercourses. If substance has entered a watercourse or sewer advise police and water authority.

6.3 Methods and material for containment and cleaning up
Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a lidded container for disposal. Clean area afterward with water and detergent.

6.4 Reference to other sections
See Section: 8 (Exposure controls / PPE) & 13 (Disposal)

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Natural ventilation is adequate.

7.2 Conditions for safe storage, including any incompatibilities
Keep in the original container in a cool, dry place.
Storage Temperature Maximum temperature 25 degC. Product may be refrigerated but do not freeze
Storage Life Six months at 25 degC. After opening, use within two months
Incompatible materials Strong oxidising agents.
Other information Product may settle on storage. Stir thoroughly before use

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits WEL: Workplace Exposure Limit (UK HSE EH40)
LTG (8 hr TWA mg/m³) Not listed
LTG (8 hr TWA mg/m³) Not listed

8.2 Exposure controls
8.2.1 Appropriate engineering controls Ventilation recommended. Follow the principles of good occupational hygiene to control personal exposures.

8.2.2 Personal protection equipment
Eye/face protection Safety spectacles recommended.
Skin protection (Hand protection/ Other) Plastic or rubber gloves recommended.

Respiratory protection No personal respiratory protective equipment normally required.

Other General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and after work. Wash contaminated clothing before reuse.

8.2.3 Environmental Exposure Controls Do not allow to enter drains, sewers or watercourses.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties (Solution)
- Appearance: Liquid.
- Colour: Black
- Odour: Slight.
- Odour Threshold (ppm): Not applicable
- pH (Value): 6.4
- Melting Point (°C) / Freezing Point (°C): Approx -10 degC
- Boiling point/boiling range (°C): Approx 102 – 105 degC
- Flash Point (°C) [Closed cup]: Not applicable. (Not combustible)
- Evaporation rate (Water = 1): 1
- Explosive limit ranges: Not applicable.
- Vapour Pressure (mmHg): 17 mmHg at 20 degC (Water)
- Vapour Density (Air=1): Not applicable.
- Density (g/ml): 1.2 – 1.25 at 25 degC
- Solubility (Water): Partially soluble
- Solubility (Other): Partially soluble in organic solvents
- Partition Coefficient (n-Octanol/water): Not applicable
- Auto Ignition Temperature (°C): Not applicable.
- Decomposition Temperature (°C): > 100 degC (Partly Evaporates)
- Viscosity: Viscous liquid
- Explosive properties: Not explosive.
- Oxidising properties: Not oxidising

9.2 Other information

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Oxidises
10.2 Chemical stability Stable under normal conditions.
10.3 Possibility of hazardous reactions Possibility of highly exothermic reaction with strong oxidizing agents
10.4 Conditions to avoid High temperatures
10.5 Incompatible materials Strong oxidising agents.
10.6 Hazardous Decomposition Product(s) Nitrogen oxides

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
11.1.1 Substances
   - Acute toxicity
     - Ingestion LD50 >10 000 mg/kg (rat) (Calculated as product)
**Inhalation (4 hrs)**
Not applicable

**Skin Contact**
LD50 > 10 000 mg/kg (rabbit) *(Calculated as product)*

**Skin corrosion/irritation**
Unlikely to cause skin irritation.

**Serious eye damage/irritation**
Product is slightly irritant to eyes. Contains low concentrations (< 1%) of irritant ingredients

**Respiratory or skin sensitization**
Product is not sensitizing. Contains a low concentration (< 1%) of a Sensitising ingredient. Skin sensitisation has been reported in studies with guinea pigs. *(Diazolidinyl urea)*

**Mutagenicity**
There is no evidence of mutagenic potential.

**Carcinogenicity**
No evidence of carcinogenicity.

**Reproductive toxicity**
No evidence of reproductive toxicity.

**STOT-single exposure**

1. **Inhalation**: Irritation of the respiratory tract. Coughing. Unlikely route of exposure.  
2. **Ingestion**: Nausea, vomiting

**STOT-repeated exposure (91 days)**
NOAEL > 10 000 mg/kg/day (rat) *(Calculated as product)*

### 11.2 Other information

### 12. SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

1. **(Fish) (96hrs)**
   - LC50 > 1000 mg/l *(Calculated as product)*
2. **(Daphnia magna) (48hrs)**
   - EC50 > 1 000 mg/l *(Calculated as product)*
3. **(Algae) (72hrs)**
   - EC50 > 1 000 mg/l *(Calculated as product)*

#### 12.2 Persistence and degradability

The organic ingredients are Biodegradable

#### 12.3 Bioaccumulative potential (96 hrs)

The product has no potential for bioaccumulation.

#### 12.4 Mobility in soil

The substance is predicted to have high mobility in soil.

#### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

#### 12.6 Other adverse effects

### 13. SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Do not empty into drains. Dispose of this material and its container at waste collection centre. Dried paint may be disposed of by landfill in accordance with local regulations.

#### 13.2 Additional Information

The waste is considered to be non hazardous.

### 14. SECTION 14: TRANSPORT INFORMATION

#### 14.1 Land transport (ADR/RID)

UN number
Not classified as dangerous for transport.

#### 14.2 Sea transport (IMDG)

UN number
Not classified as dangerous for transport.

#### 14.3 Air transport (ICAO/IATA)

UN number
Not classified as dangerous for transport.

### 15. SECTION 15: REGULATORY INFORMATION

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

#### 15.1.1 EU regulations

Revision: 1  Bare Conductive Paint  Page: 5/6  Date: 27 September 2011
Authorisations and/or restrictions on use
Not applicable.

15.1.2 National regulations
Not applicable.

15.2 Chemical Safety Assessment
No Chemical Safety Assessment (CSA) has been carried out

16. SECTION 16: OTHER INFORMATION

References:
European Chemicals Agency
European Chemicals Bureau
European Regulations and Directives
National Industrial Chemicals Notification & Assessment Scheme (Australia):
   Final Report on Hazard Classification of Common Skin Sensitisers
Published chemical directories
Suppliers’ safety data sheets
UK Health and Safety Executive

Risk Phrases
R36: Irritating to eyes.
R36/37/38: Irritating to eyes, respiratory system and skin.
R43: May cause sensitization by skin contact.

Safety Phrases
S24/25: Avoid contact with skin and eyes.

Hazard statement(s)
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Additional Information
Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Bare Conductive Limited gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Bare Conductive Limited accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

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