SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH) & 1272/2008 (CLP)

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

1.1 Product identifier

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

Ingredients	%W/W	CAS No.	EC No.	Hazard statement(s)
Water		7732-18-5	231-791-2	Not classified.
Natural Resin		Trade secret	Trade secret	Not classified.
Conductive carbon		Trade secret	Trade secret	Not classified.
Humectant		Trade secret	Trade secret	Not classified.
Diazolidinyl urea	0.1-1	78491-02-8	278-928-2	H317 Skin Sens. 1
Processing aids and preservatives	2-4	Trade secret	Trade secret	Individual levels below 1% do not give rise to classification

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	CAS No.	EC No.	Classification and Risk Phrases
Water		7732-18-5	231-791-2	Not classified.
Natural Resin		Trade secret	Trade secret	Not classified.
Conductive carbon		Trade secret	Trade secret	Not classified.
Humectant		Trade secret	Trade secret	Not classified.
Diazolidinyl urea	0.1-1	78491-02-8	278-928-2	R43: May cause sensitization by skin contact.
Processing aids and preservatives	2-4	Trade secret	Trade secret	Individual levels below 1% do not give rise to classification

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.

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)**
	LTEL (8 hr TWA mg/m³)	Not listed
	LTEL (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. May produce an allergic reaction. 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	**Inhalation :** Irritation of the respiratory tract. Coughing.Unlikely route of exposure. **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

(Fish) (96hrs)	LC50 > 1000 mg/l *(Calculated as product)*
(Daphnia magna) (48hrs)	EC50 > 1 000 mg/l *(Calculated as product)*
(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

	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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