

## Material Safety Data Sheet

according to 1907/2006/EC, article 31

MSDS No: PER080

Issue No: 3

### **IMPORTANT**

Read this MSDS before handling and disposing of this product and pass this information on to employees, customers and users of this product.

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### **1. IDENTIFICATION**

Product Name	Connect+ Single Part Bonding
Company Name	Perfection Plus Ltd
Company Address	6 Westwood Court, Brunel Road, Totton, Hants. SO40 3WX. UK
Company Phone No.	+44 (0) 2380 866 677

### **2. HAZARDS IDENTIFICATION**

<b>2.1 Classification of the substance or mixture</b>	
2.1.1 Classification – 1999/45/EC	Xi; R36/37/38-43 Symbols:
Main hazards	Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact.
2.1.2. Classification - EC 1272/2008	Skin Irrit. 2: H315; Skin Sens. 1: H317; Eye Irrit. 2: H319; Aquatic Chronic 4: H413;

### **2.2 Label Elements**

Hazard Pictograms	
Signal Word	Warning
Hazard Statement	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation. Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life.
Precautionary Statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling.

	<p>P272 - Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 - Avoid release to the environment.</p> <p>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</p>
Precautionary Statement: Response	<p>P302+P352 - IF ON SKIN: Wash with plenty of water/ .</p> <p>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P321 - Specific treatment (see on this label).</p> <p>P332+P313 - If skin irritation occurs: Get medical advice/attention.</p> <p>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P337+P313 - If eye irritation persists: Get medical advice/attention.</p>
Further information	
<p>Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of regulation (EC) No 1272/2008 (CLP/GHS) usually if they are in the finished state and intended for the final user.</p>	

### 3. COMPOSITION/INFORMATION ON PREPARATION

#### 3.1 Mixtures

67/548/EEC / 1999/45/EC

Components Name	Index No	CAS No	EINECS No	REACH Registration No	Conc (% w/w)	Classification
2-Hydroxyethyl Methacrylate	607-124-00-X	868-77-9	212-782-2		10-20%	Xi; R36/38 R43
Hydroxypropyl Methacrylate		27813-666-3	248-666-3		10-20%	Xi; R36/38-43
Urethane Dimethacrylate		72869-86-4	276-957-5		10-20%	Xi; R36/37/38-43 R52/53
Glycerol Dimethacrylate		1830-78-0	217-388-4		10 - 20%	Xi; R36/37/38
Butylated Hydroxy Toluene (2,6-Di-tert-butyl-p-cresol)		128-37-0	204-881-4		0 - 0.5%	Xn; R22 Xi; R36/38 N; R51/53

#### EC 1272/2008

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						2: H315; Skin Sens. 1: H317;
Hydroxypropyl methacrylate		27813-666-3	248-666-3		10-20%	Skin Irrit. 2: H315; Skin Sens. 1: H317; Eye Irrit. 2: H319;
Urethane Dimethacrylate		72869-86-4	276-957-5		10-20%	Aquatic Chronic 3: H412;

#### **4. FIRST AID MEASURES**

Inhalation	Irritation to respiratory system. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system. Move the exposed person to fresh air. Seek medical attention.
Skin Contact	Irritating to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Eye contact	Irritating to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. <b>DO NOT INDUCE VOMITING.</b>

#### **5. FIRE FIGHTING MEASURES**

##### **5.1 Extinguishing media**

Use extinguishing media appropriate to the surrounding fire conditions.

##### **5.2 Special hazards arising from the substance or mixture**

Burning produces irritating, toxic and obnoxious fumes.

##### **5.3 Advice for firefighters**

Wear suitable respiratory equipment when necessary.

#### **6. HANDLING AND STORAGE**

##### **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation of the working area. Wear suitable protective equipment.

##### **6.2 Environmental precautions**

Do not allow product to enter drains. Prevent further spillage if safe.

##### **6.3 Methods and materials for containment and cleaning up.**

Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing. Wear suitable protective clothing.

### 7.2 Conditions for safe storage

Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Exposure Limit Values

<b>Butylated Hydroxy Toluene (2,6-Di-tert-butyl-p-cresol)</b>	<b>WEL 8-hr limit ppm: -</b>	<b>WEL 8-hr limit mg/m<sup>3</sup>: 10</b>
	<b>WEL 15 min limit ppm: -</b>	<b>WEL 15 min limit mg/m<sup>3</sup>: -</b>
	<b>WEL 8-hr limit mg/m<sup>3</sup> total inhalable dust: -</b>	<b>WEL 15 min limit mg/m<sup>3</sup> total inhalable dust: -</b>
	<b>WEL 8-hr limit mg/m<sup>3</sup> total respirable dust: -</b>	<b>WEL 15 min limit mg/m<sup>3</sup> total respirable dust: -</b>

### 8.2 Exposure controls



#### 8.2.1 Appropriate engineering controls

Ensure adequate ventilation of the working area.

#### 8.2.2 Individual Protection Measures

Wear chemical protective clothing

Eye / face protection – in case of splashing wear approved safety goggles

Skin / Hand protection – chemical resistant gloves

Respiratory protection – wear suitable respiratory equipment when necessary.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical State	Liquid
Colour	Yellow
Odour	Odourless/Slight
Odour Threshold	No data available
pH	No data available

Melting Point	-10 °C
Freezing Point	No data available
Initial boiling Point	100 °C
Flash Point (°C)	100 °C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Fat Solubility	No data available
Partition coefficient	No data available
Autoignition temperature	300 °C
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	Slightly miscible in water

## 9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Strong acids and strong bases.

### 10.4 Conditions to avoid

Direct sunlight. Heat.

### 10.5 Incompatible materials

No data available.

### 10.6 Hazardous decomposition products

No data is available on this product.

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute toxicity	May cause irritation to skin and eyes.
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Serious eye damage/irritation	May cause irritation to eyes.
Respiratory or skin sensitisation	May cause sensitisation by skin contact.

## 11.2 Toxicological Information

<b>2-Hydroxyethyl Methacrylate</b>	<b>Oral Rat LD50:</b> 5564 mg/kg	<b>Dermal Rabbit LD50:</b> 5000 mg/kg
<b>Butylated Hydroxy Toluene</b>	<b>Dermal Rat LD50:</b> 2000	<b>Oral Rat LD50:</b> 6000

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>2-Hydroxyethyl Methacrylate</b>	<b>Daphnia EC50/48h:</b> 380.0000 mg/l <b>Fish LC50/96h:</b> 100.0000 mg/l	<b>Algae IC50/72h:</b> 836.0000 mg/l
<b>Butylated Hydroxy Toluene</b>	<b>Daphnia EC50/48h:</b> 0.4800 mg/l <b>Fish LC50/96h:</b> 5.3000 mg/l	<b>Algae IC50/72h:</b> 1.7000 mg/l

<b>12.2. Persistence and degradability</b>	No data is available on this product.
<b>12.3. Bioaccumulative potential</b>	
<b>Partition coefficient</b>	<b>Single Part Bonding</b> No data available
<b>12.4. Mobility in soil</b>	No data is available on this product.
<b>12.5. Results of PBT and vPvB assessment</b>	No data is available on this product.
<b>Further information</b>	No data is available on this product.

## 13. DISPOSAL CONSIDERATIONS

Dispose of in compliance with all local and national regulations.  
For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.  
Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

## 14. TRANSPORTATION INFORMATION

14.1. UN number	The product is not classified as dangerous for carriage.
14.2. UN proper shipping name	The product is not classified as dangerous for carriage.
14.3. Transport hazard class(es)	The product is not classified as dangerous for carriage.
14.4. Packing group	The product is not classified as dangerous for carriage.
14.5. Environmental	The product is not classified as dangerous for carriage.

hazards	
14.6. Special precautions for user	The product is not classified as dangerous for carriage.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	The product is not classified as dangerous for carriage.
Further information	The product is not classified as dangerous for carriage.

## 15. REGULATORY INFORMATION

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

No data is available on this product.

## 16. OTHER INFORMATION

Revision	<p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> <li>2 - 2.1.2. Classification - EC 1272/2008.</li> <li>2 - Hazard pictograms.</li> <li>2 - Signal Word.</li> <li>2 - Precautionary Statement: Prevention.</li> <li>2 - Precautionary Statement: Response.</li> <li>2 - Precautionary Statement: Disposal.</li> <li>2 - Further information.</li> <li>5 - 5.1. Extinguishing media.</li> <li>7 - 7.1. Precautions for safe handling.</li> <li>8 - Respiratory protection.</li> <li>8 - Skin protection - Handprotection.</li> <li>9 - 9.1. Information on basic physical and chemical properties (PH).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Flammability (solid, gas)).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Explosive properties).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Oxidising properties).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Vapour pressure).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Relative density).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Viscosity).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Vapour density).</li> <li>9 - 9.1. Information on basic physical and chemical properties (Evaporation rate).</li> <li>9 - 9.1. Information on basic physical and chemical properties</li> </ul>
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	<p>(Freezing Point).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Fat Solubility).</p> <p>9 - 9.1. Information on basic physical and chemical properties (Odour threshold).</p> <p>9 - 9.2. Other information (Conductivity).</p> <p>9 - 9.2. Other information (Partition coefficient).</p> <p>9 - 9.2. Other information (Gas group).</p> <p>9 - 9.2. Other information (Surface tension).</p> <p>9 - 9.2. Other information (Benzene Content).</p> <p>9 - 9.2. Other information (Product Subcategory).</p> <p>9 - 9.2. Other information (Lead content).</p> <p>10 - 10.4. Conditions to avoid.</p> <p>10 - 10.3. Possibility of hazardous reactions.</p> <p>10 - 10.6. Hazardous decomposition products.</p> <p>10 - 10.1. Reactivity.</p> <p>10 - 10.5. Incompatible materials.</p> <p>11 - Serious eye damage/irritation.</p> <p>12 - 12.4. Mobility in soil.</p> <p>12 - 12.2. Persistence and degradability.</p> <p>12 - 12.5. Results of PBT and vPvB assessment.</p> <p>15 - Labelling.</p> <p>15 - Symbols.</p> <p>15 - 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.</p> <p>16 - Maximum content of VOC.</p>
Text of risk phrases in Section 3	<p>R22 - Harmful if swallowed.</p> <p>R36/37/38 - Irritating to eyes, respiratory system and skin.</p> <p>R36/38 - Irritating to eyes and skin.</p> <p>R43 - May cause sensitisation by skin contact.</p> <p>R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
Text of Hazard Statements in Section 3	<p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Skin Sens. 1: H317 - May cause an allergic skin reaction.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <p>Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.</p>
Further information	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.</p>

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**SUPERSEDES  
ISSUE: 2**



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This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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