



**SAFETY DATA SHEET**  
**BRUSHABLE CERAMIC BLUE RESIN**

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

**1.1. Product identifier**

**Product name** BRUSHABLE CERAMIC BLUE RESIN

**Product number** X0030

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

**Identified uses** Resin.

**1.3. Details of the supplier of the safety data sheet**

**Supplier**

ITW Performance Polymers  
Bay 150  
Shannon Industrial Estate  
Co. Clare  
Ireland  
V14 DF82  
353(61)771500  
353(61)471285  
mail@itwpp.com

**1.4. Emergency telephone number**

**Emergency telephone** +44(0)1235 239 670 (24h)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification (EC 1272/2008)**

**Physical hazards** Not Classified

**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

**Environmental hazards** Aquatic Chronic 2 - H411

**Human health**

The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

**2.2. Label elements**

**Pictogram**



**Signal word**

Warning

## BRUSHABLE CERAMIC BLUE RESIN

<b>Hazard statements</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of 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. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
<b>Supplemental label information</b>	EUH205 Contains epoxy constituents. May produce an allergic reaction.
<b>Contains</b>	EPOXY RESIN (Number average MW <= 700 ), 1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE
<b>Supplementary precautionary statements</b>	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P501 Dispose of contents/ container in accordance with national regulations.

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>EPOXY RESIN (Number average MW &lt;= 700 )</b>	<b>30-60%</b>
CAS number: 25068-38-6                      EC number: 500-033-5	REACH registration number: 01-2119456619-26-0000
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
<b>1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE</b>	<b>1-5%</b>
CAS number: 14228-73-0                      EC number: 238-098-4	
<b>Classification</b> Skin Sens. 1 - H317	

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<b>TITANIUM DIOXIDE</b>	<b>1-5%</b>
CAS number: 13463-67-7	EC number: 236-675-5
	REACH registration number: 01-2119489379-17-0000
<b>Classification</b> Not Classified	
<b>2-BUTOXYETHANOL</b>	<b>&lt;1%</b>
CAS number: 111-76-2	EC number: 203-905-0
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	
<b>TOLUENE</b>	<b>&lt;1%</b>
CAS number: 108-88-3	EC number: 203-625-9
<b>Classification</b> Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304	

The full text for all hazard statements is displayed in Section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Inhalation</b>	Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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#### 4.3. Indication of any immediate medical attention and special treatment needed

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**Notes for the doctor** No specific recommendations. If in doubt, get medical attention promptly.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide or dry powder.

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

**Specific hazards** Irritating gases or vapours.

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Do not use water jet as an extinguisher, as this will spread the fire. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: Accidental release measures

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

**Personal precautions** Warn everybody of potential hazards and evacuate if necessary. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

#### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Open drum carefully as content may be under pressure. Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Avoid eating, drinking and smoking when using the product. Good personal hygiene procedures should be implemented.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

#### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

## BRUSHABLE CERAMIC BLUE RESIN

### TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): 10 mg/m<sup>3</sup> total dust

### 2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm(Sk)

Short-term exposure limit (15-minute): WEL 50 ppm(Sk)

### TOLUENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 191 mg/m<sup>3</sup>(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 384 mg/m<sup>3</sup>(Sk)

WEL = Workplace Exposure Limit

### Ingredient comments

WEL = Workplace Exposure Limits

### EPOXY RESIN (Number average MW <= 700 ) (CAS: 25068-38-6)

#### DNEL

Workers - Dermal; Short term systemic effects: 8.33 mg/kg/day

Workers - Inhalation; Short term systemic effects: 12.25 mg/m<sup>3</sup>

### TRIETHYLENETETRAMINE (CAS: 112-24-3)

#### DNEL

Workers - Inhalation; Long term systemic effects: 1 mg/m<sup>3</sup>

Workers - Inhalation; Short term systemic effects: 5380 mg/m<sup>3</sup>

Workers - Dermal; Long term systemic effects: 0.57 mg/kg/day

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

### Hand protection

Wear protective gloves. It is recommended that gloves are made of the following material: Butyl rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.

### Other skin and body protection

Wear apron or protective clothing in case of contact.

### Hygiene measures

Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin. Promptly remove any clothing that becomes contaminated.

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**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Viscous liquid.
<b>Colour</b>	Blue.
<b>Odour</b>	Slight.
<b>pH</b>	pH (diluted solution): 7.0 50g/l H <sub>2</sub> O
<b>Initial boiling point and range</b>	>260°C @
<b>Flash point</b>	>204°C
<b>Vapour pressure</b>	<0.03mmHg @ °C
<b>Relative density</b>	1.83 @ °C
<b>Solubility(ies)</b>	Slightly soluble in water.
<b>Auto-ignition temperature</b>	>300°C
<b>Viscosity</b>	50,000 cP @ 25°C

#### 9.2. Other information

**Other information** Not available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** Acids. Strong oxidising agents.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Not available.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.

#### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Strong oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Aldehydes. Acids.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

## BRUSHABLE CERAMIC BLUE RESIN

<b>Skin contact</b>	Irritating to skin. Prolonged contact may cause redness, irritation and dry skin. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.
<b>Eye contact</b>	Irritating to eyes.
<b>Acute and chronic health hazards</b>	The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.
<b>Route of entry</b>	Inhalation Ingestion.

### SECTION 12: Ecological Information

**Ecotoxicity** Avoid release to the environment. The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

#### 12.1. Toxicity

**Toxicity** Very toxic to aquatic organisms.

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

**Mobility** Do not discharge into drains or watercourses or onto the ground.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

**Other adverse effects** Not available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

<b>General information</b>	When handling waste, the safety precautions applying to handling of the product should be considered.
<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
<b>Waste class</b>	08 04 99

### SECTION 14: Transport information

**General** No other information known.

#### 14.1. UN number

<b>UN No. (ADR/RID)</b>	3082
<b>UN No. (IMDG)</b>	3082
<b>UN No. (ICAO)</b>	3082

#### 14.2. UN proper shipping name

## BRUSHABLE CERAMIC BLUE RESIN

<b>Proper shipping name (ADR/RID)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
<b>Proper shipping name (IMDG)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
<b>Proper shipping name (ICAO)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))
<b>Proper shipping name (ADN)</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN (Number average MW <= 700 ))

### 14.3. Transport hazard class(es)

<b>ADR/RID class</b>	9
<b>ADR/RID label</b>	9
<b>IMDG class</b>	9
<b>ICAO class/division</b>	9

#### Transport labels



### 14.4. Packing group

<b>ADR/RID packing group</b>	III
<b>IMDG packing group</b>	III
<b>ICAO packing group</b>	III

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

<b>EmS</b>	F-A, S-F
<b>Emergency Action Code</b>	•3Z
<b>Hazard Identification Number (ADR/RID)</b>	90
<b>Tunnel restriction code</b>	(E)

### 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 No information required.

## SECTION 15: Regulatory information

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



## BRUSHABLE CERAMIC BLUE RESIN

### EU legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Revision date</b>	03/04/2018
<b>Revision</b>	19
<b>Supersedes date</b>	28/04/2017
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic 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.