Revision date: 28/05/2015 Revision: 17 Supersedes date: 05/12/2014

ITW Engineered Polymers

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

ITW Engineered Polymers Supplier

Bay 150

Shannon Industrial Estate

Shannon Co. Clare

+353 (0)61 471 299 +353 (0)61 471 285 mail@itwep.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

Not Classified Physical hazards

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

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or Xi;R36/38. R43. N;R51/53.

1999/45/EC)

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 Revision date: 28/05/2015 Revision: 17 Supersedes date: 05/12/2014

BRUSHABLE CERAMIC BLUE RESIN

Hazard statements H319 Causes serious eye irritation.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

Precautionary statements 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.

Supplemental label

information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains EPOXY RESIN (Number average MW <= 700), 1,4-BIS[(2,3-

EPOXYPROPOXY)METHYL]CYCLOHEXANE

Supplementary precautionary

statements

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

EPOXY RESIN (Number average MW <= 700)

30-60%

CAS number: 25068-38-6 EC number: 500-033-5 REACH registration number: 01-

2119456619-26-0000

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Irrit. 2 - H315

R43 Xi;R36/38 N;R51/53

Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE

1-5%

CAS number: 14228-73-0 EC number: 238-098-4

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Sens. 1 - H317 -

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TITANIUM DIOXIDE 1-5%

CAS number: 13463-67-7 EC number: 236-675-5 REACH registration number: 01-

2119489379-17-0000

Classification Classification (67/548/EEC or 1999/45/EC)

Not Classified -

2-BUTOXYETHANOL <1%

CAS number: 111-76-2 EC number: 203-905-0

Classification Classification (67/548/EEC or 1999/45/EC)

Acute Tox. 4 - H302 Xn;R20/21/22 Xi;R36/38

Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

TOLUENE <1%

CAS number: 108-88-3 EC number: 203-625-9

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 F;R11 Repr. Cat. 3;R63 Xn;R48/20,R65 Xi;R38 R67

Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible).

Inhalation 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.

Ingestion 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.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention if irritation persists after washing.

Eye contact 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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

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.

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

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): 10 mg/m3 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/m3(Sk) Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 384 mg/m3(Sk)

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

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.

Hand protection Use protective gloves. It is recommended that gloves are made of the following material: Butyl

rubber.

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 hands 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.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Viscous liquid.

Colour Blue.
Odour Slight.

pH pH (diluted solution): 7.0 50g/l H20

Initial boiling point and range >260°C @ Flash point >204°C

Vapour pressure <0.03mmHg @ °C

Relative density 1.83 @ °C

Solubility(ies) Slightly soluble in water.

Auto-ignition temperature >300°C

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Viscosity 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

Not available.

reactions

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

Skin contact 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.

Eye contact Irritating to eyes.

Acute and chronic health The produ

hazards

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

individuals.

Route of entry 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

General information When handling waste, the safety precautions applying to handling of the product should be

considered.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

Waste class 08 04 99

SECTION 14: Transport information

General No other information known.

14.1. UN number

UN No. (ADR/RID) 3082 UN No. (IMDG) 3082 UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN

(Number average MW <= 700))

Proper shipping name

(IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN

(Number average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN

(Number average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN

(Number average MW <= 700))

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID subsidiary risk

ADR/RID label 9

IMDG class 9

IMDG subsidiary risk

ICAO class/division 9

ICAO subsidiary risk

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

Emergency Action Code •3Z

Hazard Identification Number 90

(ADR/RID)

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to No information required.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

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).

Water hazard classification WGK 2

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Risk phrases in full NC Not classified.

R10 Flammable.

R11 Highly flammable.

R20/21 Harmful by inhalation and in contact with skin.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R37/38 Irritating to respiratory system and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through

inhalation.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R63 Possible risk of harm to the unborn child.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

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.