

ITW Performance Polymers

SAFETY DATA SHEET BRUSHABLE CERAMIC HARDENER

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

1.1. Product identifier

Product name BRUSHABLE CERAMIC HARDENER
Product number X0017

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

Identified uses Hardener.

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
customerservice.shannon@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 Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT RE 2 - H373
Environmental hazards Aquatic Chronic 3 - H412
Human health Corrosive to skin and eyes. Corrosive. Prolonged contact causes serious eye and tissue damage.

2.2. Label elements

Pictogram



Signal word

Danger

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Hazard statements	H302+H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P260 Do not breathe vapour/ spray. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/ attention if you feel unwell.
Contains	BENZYL ALCOHOL, m-XYLYLENEDIAMINE, PACM Oligomers, METHYLENEDI(CYCLOHEXYLAMINE)
Supplementary precautionary statements	P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/ doctor. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P405 Store locked up. 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

m-XYLYLENEDIAMINE		10-30%
CAS number: 1477-55-0	EC number: 216-032-5	REACH registration number: 01-2119480150-50-0000
Classification		
Acute Tox. 4 - H302		
Acute Tox. 4 - H332		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		

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PACM Oligomers	10-30%
CAS number: 135108-88-2	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1C - H314	
Skin Sens. 1 - H317	
STOT RE 2 - H373	
Aquatic Chronic 3 - H412	
BENZYL ALCOHOL	10-30%
CAS number: 100-51-6	
EC number: 202-859-9	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
METHYLENEDI(CYCLOHEXYLAMINE)	5-10%
CAS number: 1761-71-3	
EC number: 217-168-8	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
STOT RE 2 - H373	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Avoid contact with skin and eyes. Do not breathe vapour. 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	This product is corrosive. Give plenty of water to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 any discomfort continues.

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.
Inhalation	Toxic by inhalation. Severe irritation of nose and throat.

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Ingestion	Harmful if swallowed. This product is corrosive.
Skin contact	This product is corrosive. May cause an allergic skin reaction. Allergic rash. May cause serious chemical burns to the skin.
Eye contact	This product is corrosive. Dust or splashes from the mixture may cause permanent eye damage.

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.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Carbon dioxide (CO ₂). Dry chemicals. Foam. Water.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Avoid breathing fire gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.
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Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.
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6.2. Environmental precautions

Environmental precautions	Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with sand or other inert absorbent. 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.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Use only in well-ventilated areas. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.
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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).
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7.3. Specific end use(s)

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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

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. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. 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 chemical protective suit.

Hygiene measures

Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.

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. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Amber.
Odour	Amine.
pH	pH (diluted solution): 10.5-11.5 5%
Initial boiling point and range	>204°C @
Flash point	93°C
Evaporation rate	<<1
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: N/D Lower flammable/explosive limit: N/D

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Vapour pressure	<1mmHg @ °C
Vapour density	>1
Relative density	1.05 @ 20 °C°C
Solubility(ies)	Miscible with water.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Acids. Strong oxidising agents. Organic peroxides/hydroperoxides.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Will not polymerise.
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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.
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10.5. Incompatible materials

Materials to avoid	Avoid contact with the following materials: Acids. Oxidising agents. Organic peroxides/hydroperoxides. Inorganic peroxides.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	505.2
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Acute toxicity - inhalation

ATE inhalation (gases ppm)	7,502.5
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ATE inhalation (vapours mg/l)	18.34
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ATE inhalation (dusts/mists mg/l)	2.5
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Inhalation	Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Coughing. Toxic by inhalation.
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Ingestion	Causes burns. Harmful if swallowed. May cause severe internal injury. Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.
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Skin contact	May be absorbed through the skin. Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin.
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Eye contact	This product is strongly corrosive. Causes severe burns. Immediate first aid is imperative. A single exposure may cause the following adverse effects: Corneal damage.
Acute and chronic health hazards	This product is corrosive.
Target organs	Liver Kidneys Central nervous system

SECTION 12: Ecological Information

Ecotoxicity Avoid releasing into the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

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) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE)

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Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE)

Proper shipping name (ADN) AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S (HEXAMETHYLENEDIAMINE, DIETHYLENETRIAMINE)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID label	8
IMDG class	8
ICAO class/division	8

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
No.

14.6. Special precautions for user

EmS	F-A, S-B
Emergency Action Code	3X
Hazard Identification Number (ADR/RID)	80

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

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

Revision comments	Revised classification.
Revision date	03/08/2018

BRUSHABLE CERAMIC HARDENER

Revision	15
Supersedes date	03/04/2018
Hazard statements in full	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful 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.