SAFETY DATA SHEET
CERAMIC PUTTY HARDENER

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

1.1. Product identifier
Product name CERAMIC PUTTY HARDENER
Product number 11700(H)

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 - H312 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam.
1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 STOT RE 2 - H373
Environmental hazards Not Classified
Human health Corrosive to skin and eyes. Corrosive. Prolonged contact causes serious eye and tissue damage.

2.2. Label elements
Hazard pictograms

Signal word Danger
CERAMIC PUTTY HARDENER

Hazard statements
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
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.
P308+P313 IF exposed or concerned: Get medical advice/ attention.

Contains
PHENOL, TRIETHYLENETETRAMINE

Supplementary precautionary statements
P201 Obtain special instructions before use.
P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P284 [In case of inadequate ventilation] wear respiratory protection.
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.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
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
CERAMIC PUTTY HARDENER

PHENOL

<table>
<thead>
<tr>
<th>CAS number: 108-95-2</th>
<th>EC number: 203-632-7</th>
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Classification

- Acute Tox. 3 - H301
- Acute Tox. 3 - H311
- Acute Tox. 3 - H331
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Muta. 2 - H341
- STOT RE 2 - H373

PHENOL 10-30%

CAS number: 108-95-2
EC number: 203-632-7

Classification

- Acute Tox. 3 - H301
- Acute Tox. 3 - H311
- Acute Tox. 3 - H331
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Muta. 2 - H341
- STOT RE 2 - H373

Triethylenetetramine

| CAS number: 112-24-3 | EC number: 203-950-6 | REACH registration number: 01-2119487919-13-0000 |

Classification

- Acute Tox. 4 - H312
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Skin Sens. 1 - H317
- Aquatic Chronic 3 - H412

Triethylenetetramine 5-10%

CAS number: 112-24-3
EC number: 203-950-6
REACH registration number: 01-2119487919-13-0000

Classification

- Acute Tox. 4 - H312
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Skin Sens. 1 - H317
- Aquatic Chronic 3 - H412

Titanium Dioxide

| CAS number: 13463-67-7 | EC number: 236-675-5 | REACH registration number: 01-2119489379-17-0000 |

Classification

Not Classified

Titanium Dioxide 1-5%

CAS number: 13463-67-7
EC number: 236-675-5
REACH registration number: 01-2119489379-17-0000

Classification

Not Classified

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

Do not breathe vapour. 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. Get medical attention if any discomfort continues.

Ingestion

Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Give milk instead of water if readily available. 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.
CERAMIC PUTTY HARDENER

Inhalation
Harmful by inhalation.

Ingestion
Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach.

Skin contact
Causes severe skin burns and eye damage. Mild dermatitis, allergic skin rash. May cause sensitisation or allergic reactions in sensitive individuals.

Eye contact
Risk of serious damage to eyes.

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. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Do not breathe vapour. Avoid contact with skin and eyes.

6.2. Environmental precautions
Environmental precautions
Avoid discharge into drains. 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
Provide adequate ventilation. Use only in well-ventilated areas. Do not breathe vapour. Keep away from heat, sparks and open flame. Avoid contact with skin and eyes. Open drum carefully as content may be under pressure. Do not eat, drink or smoke 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).
CERAMIC PUTTY HARDENER

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

PHENOL
Long-term exposure limit (8-hour TWA): WEL 2 ppm(Sk)
Short-term exposure limit (15-minute): WEL

TITANIUM DIOXIDE
Long-term exposure limit (8-hour TWA): 10 mg/m³ total dust
WEL = Workplace Exposure Limit

Ingredient comments
WEL = Workplace Exposure Limits

TRIETHYLENETETRAMINE (CAS: 112-24-3)

DNEL
Workers - Inhalation; Long term systemic effects: 1 mg/m³
Workers - Inhalation; Short term systemic effects: 5380 mg/m³
Workers - Dermal; Long term systemic effects: 0.57 mg/kg/day

8.2. Exposure controls

Protective equipment

Provide adequate general and local exhaust ventilation.

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

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. 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. 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.

Respiratory protection
Avoid inhalation of vapours. 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.
CERAMIC PUTTY HARDENER

9.1. Information on basic physical and chemical properties

Appearance  Paste.
Colour  White/off-white.
Odour  Phenolic.
pH  pH (concentrated solution): alkaline @ 20 ºC
Flash point  >120°C
Relative density  1.09 @ 20°C
Solubility(ies)  Slightly soluble in water.
Viscosity  500-1000 Pa s @ 25°C

9.2. Other information

Other information  Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity


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.

10.5. Incompatible materials


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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg)  66,667.0

Acute toxicity - dermal
ATE dermal (mg/kg)  174,603.0

Acute toxicity - inhalation
ATE inhalation (gases ppm)  466,667.0
ATE inhalation (vapours mg/l)  200.0
ATE inhalation (dusts/mists mg/l)  333.0
CERAMIC PUTTY HARDENER

Inhalation
Avoid inhalation of vapours. Toxic by inhalation.

Ingestion
Toxic if swallowed.

Skin contact
Toxic in contact with skin. Causes burns. May cause sensitisation by skin contact. Corrosive. Prolonged contact causes serious tissue damage.

Eye contact
Causes burns. Risk of serious damage to eyes.

Acute and chronic health hazards
This product is corrosive. This product may cause skin and eye irritation. Prolonged contact may cause burns.

Route of exposure
Inhalation Skin absorption Ingestion.

SECTION 12: Ecological information

Ecotoxicity
Avoid release to 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
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.
CERAMIC PUTTY HARDENER

14.3. Transport hazard class(es)
No transport warning sign required.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

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
Not applicable.

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 29/01/2020
Revision 8
Supersedes date 03/04/2018

Hazard statements in full
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H341 Suspected of causing genetic defects.
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.