

# **ITW** Engineered Polymers

## SAFETY DATA SHEET PUTTY HARDENER

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

#### 1.1. Product identifier

Product name PUTTY HARDENER  
Product number X0013

#### 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 Engineered Polymers  
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

Physical hazards Not Classified  
Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd  
Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or 1999/45/EC) Xn;R21. C;R34. R43. R52/53.

Human health Corrosive. Prolonged contact causes serious eye and tissue damage.

#### 2.2. Label elements

##### Pictogram



Signal word

Danger

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<b>Hazard statements</b>	H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statements</b>	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/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. P310 Immediately call a POISON CENTER/doctor. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P501 Dispose of contents/container in accordance with national regulations.
<b>Contains</b>	TRIETHYLENETETRAMINE, NONYLPHENOL, 2-PIPERAZIN-1-YLETHYLAMINE
<b>Supplementary precautionary statements</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe vapour/spray. P261 Avoid breathing vapour/spray. P264 Wash contaminated skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. 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. P308+P313 IF exposed or concerned: Get medical advice/attention. P321 Specific treatment (see medical advice on this label). P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P405 Store locked up.

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>TRIETHYLENETETRAMINE</b>		<b>30-60%</b>
CAS number: 112-24-3	EC number: 203-950-6	REACH registration number: 01-2119487919-13-0000
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 4 - H312	C;R34 Xn;R21 R43 R52/53	
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Chronic 3 - H412		

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<b>2-PIPERAZIN-1-YLETHYLAMINE</b>	<b>5-10%</b>
CAS number: 140-31-8	EC number: 205-411-0
	REACH registration number: 01-2119471486-30-0003
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	<b>Classification (67/548/EEC or 1999/45/EC)</b> C;R34 Xn;R21/22 R43 R52/53
<b>NONYLPHENOL</b>	<b>5-10%</b>
CAS number: 25154-52-3	EC number: 246-672-0
M factor (Acute) = 1	M factor (Chronic) = 1
<b>Classification</b> Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Repr. 2 - H361fd Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	<b>Classification (67/548/EEC or 1999/45/EC)</b> Repr. Cat. 3;R62,R63 C;R34 Xn;R22 N;R50/53
<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>Classification (67/548/EEC or 1999/45/EC)</b> -

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

<b>General information</b>	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Do not breathe vapour/spray. Avoid contact with eyes.
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. Give plenty of water to drink. Get medical attention.
<b>Skin contact</b>	Remove affected person from source of contamination. Wash skin thoroughly 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

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

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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**Suitable extinguishing media** Extinguish with the following media: Water. Foam. Dry chemicals. Carbon dioxide (CO<sub>2</sub>).

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

**Specific hazards** Avoid breathing fire gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** 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** Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

### 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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Use only in well-ventilated areas. Provide adequate ventilation. Avoid inhalation of vapours. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Do not use in confined spaces without adequate ventilation and/or respirator. 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 and cool place.

### 7.3. Specific end use(s)

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### TITANIUM DIOXIDE

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

### 8.2. Exposure controls

#### Protective equipment



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<b>Appropriate engineering controls</b>	Provide adequate general and local exhaust ventilation.
<b>Eye/face protection</b>	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.
<b>Hand protection</b>	Wear protective gloves made of the following material: Rubber or plastic.
<b>Other skin and body protection</b>	Avoid contact with skin. Wear apron or protective clothing in case of contact.
<b>Hygiene measures</b>	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.
<b>Respiratory protection</b>	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

<b>Appearance</b>	Paste.
<b>Colour</b>	Cream.
<b>Odour</b>	Amine.
<b>pH</b>	pH (concentrated solution): 10.5 @ 20 °C
<b>Initial boiling point and range</b>	>232°C @
<b>Flash point</b>	>93°C
<b>Vapour pressure</b>	<0.01 mmHg @ °C
<b>Relative density</b>	0.98 @ 20 °C°C
<b>Solubility(ies)</b>	Soluble in water.

#### 9.2. Other information

### 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

#### 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** Avoid contact with the following materials: Acids. Oxidising agents.

#### 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.

### SECTION 11: Toxicological information

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### 11.1. Information on toxicological effects

#### Acute toxicity - oral

ATE oral (mg/kg) 6,002.4

#### Acute toxicity - dermal

ATE dermal (mg/kg) 2,768.24

<b>Inhalation</b>	Vapour from this product may be hazardous by inhalation.
<b>Ingestion</b>	Harmful if swallowed.
<b>Skin contact</b>	May be absorbed through the skin. Prolonged or repeated exposure may cause severe irritation. May cause sensitisation by skin contact. May cause sensitisation or allergic reactions in sensitive individuals.
<b>Eye contact</b>	Risk of serious damage to eyes.
<b>Acute and chronic health hazards</b>	Causes burns.
<b>Route of entry</b>	Inhalation Skin absorption Ingestion. Skin and/or eye contact
<b>Target organs</b>	Prolonged or repeated exposure may cause the following adverse effects: Risk of serious damage to eyes. May cause damage to the liver. May cause damage to the kidneys. Central and/or peripheral nervous system damage.

### SECTION 12: Ecological Information

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

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

#### 12.3. Bioaccumulative potential

#### 12.4. Mobility in soil

**Mobility** The product is soluble in water. Do not discharge into drains or watercourses or onto the ground.

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

#### 12.6. Other adverse effects

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**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

#### 14.2. UN proper shipping name

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### 14.3. Transport hazard class(es)

ADR/RID subsidiary risk

IMDG subsidiary risk

ICAO subsidiary risk

Transport labels

### 14.4. Packing group

### 14.5. Environmental hazards

### 14.6. Special precautions for user

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

## SECTION 15: Regulatory information

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

Water hazard classification      WGK 2

### 15.2. Chemical safety assessment

## SECTION 16: Other information

Revision date                      05/05/2015

Revision                              20

Supersedes date                  20/08/2014

**Risk phrases in full**

NC Not classified.  
R21 Harmful in contact with skin.  
R21/22 Harmful in contact with skin and if swallowed.  
R22 Harmful if swallowed.  
R34 Causes burns.  
R43 May cause sensitisation by skin contact.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R62 Possible risk of impaired fertility.  
R63 Possible risk of harm to the unborn child.

**Hazard statements in full**

H302 Harmful if swallowed.  
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.  
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
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.