# **TW** Engineered Polymers

## SAFETY DATA SHEET TITANIUM PUTTY (Ti) RESIN.

SECTION 1: Identification of the substance/mixture and of the company/undertaking	
1.1. Product identifier	
Product name	TITANIUM PUTTY (Ti) RESIN.
Product number	X0007
1.2. Relevant identified uses o	f the substance or mixture and uses advised against
Identified uses	Resin.
1.3. Details of the supplier of the	he 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 nur	nber
Emergency telephone	+44(0)1235 239 670 (24h)
SECTION 2: Hazards identification	ation
2.1. Classification of the subst	
2.1. Classification of the subst	ance or mixture
2.1. Classification of the subst <u>Classification</u> Physical hazards	ance or mixture Not Classified
2.1. Classification of the subst <u>Classification</u> Physical hazards Health hazards	<b>ance or mixture</b> Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
2.1. Classification of the subst <u>Classification</u> Physical hazards	ance or mixture Not Classified
2.1. Classification of the subst <u>Classification</u> Physical hazards Health hazards	ance or mixture Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411
2.1. Classification of the subst <u>Classification</u> Physical hazards Health hazards Environmental hazards Classification (67/548/EEC or	ance or mixture Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411
2.1. Classification of the subst <u>Classification</u> Physical hazards Health hazards Environmental hazards Classification (67/548/EEC or 1999/45/EC)	ance or mixture Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411 Xi;R36/38. R43. N;R51/53. The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive
2.1. Classification of the subst <u>Classification</u> Physical hazards Health hazards Environmental hazards Classification (67/548/EEC or 1999/45/EC) Human health	ance or mixture Not Classified Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411 Xi;R36/38. R43. N;R51/53. The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive

Hazard statements	H317 May cause an allergic skin reaction. H315 Causes skin irritation. H411 Toxic to aquatic life with long lasting effects. H319 Causes serious eye irritation.
Precautionary statements	<ul> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P302+P352 IF ON SKIN: Wash with plenty of water.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</li> </ul>
Supplemental label information	EUH205 Contains epoxy constituents. May produce an allergic reaction.
Contains	EPOXY RESIN (Number average MW <= 700 )
Supplementary precautionary statements	<ul> <li>P261 Avoid breathing vapour/spray.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P272 Contaminated work clothing should not be allowed out of the workplace.</li> <li>P321 Specific treatment (see medical advice on this label).</li> <li>P332+P313 If skin irritation occurs: Get medical advice/attention.</li> <li>P337+P313 If eye irritation persists: Get medical advice/attention.</li> <li>P362+P364 Take off contaminated clothing and wash it before reuse.</li> <li>P391 Collect spillage.</li> <li>P501 Dispose of contents/container in accordance with national regulations.</li> </ul>

#### 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 )	10-30%
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01- 2119456619-26-0000
Classification	Classificatio	on (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315	R43 Xi;R36	6/38 N;R51/53
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		

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. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

Skin contact	Remove affected person from source of contamination. Wash skin thoroughly 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 immedia	te medical attention and special treatment needed
Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
SECTION 5: Firefighting meas	sures
5.1. Extinguishing media	
Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
5.2. Special hazards arising fro	om 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. 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	e measures
6.1. Personal precautions, pro	tective 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 precaution	S
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 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.
6.4. Reference to other section	ns
Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe hand	ling
Usage precautions	Use only in well-ventilated areas. Handle and open container with care. Keep away from heat, sparks and open flame. Do not use in confined spaces without adequate ventilation and/or respirator. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.
7.2. Conditions for safe storag	e, 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 Contr	ols/personal protection
8.1. Control parameters	
Ingredient comments	No exposure limits known for ingredient(s).
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.
Hand protection	Wear protective gloves made of the following material: Rubber or plastic.
Other skin and body protection	Avoid contact with skin. 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.

## SECTION 9: Physical and Chemical Properties

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

Appearance	Paste.
Colour	Dark. Grey.
Odour	Slight.
рН	pH (concentrated solution): 7.0 @ 20 °C
Melting point	N/D°C
Initial boiling point and range	>260°C @
Flash point	> 204°C
Evaporation rate	<<1 ( butyl acetate =1)
Vapour pressure	0.03mmHg @ °C
Vapour density	>1
Relative density	2.5 @ @ 20 °C°C
Solubility(ies)	Slightly soluble in water.
Auto-ignition temperature	>300°C

9.2. Other information		
Other information	Not available.	
SECTION 10: Stability and re	activity	
10.1. Reactivity		
Reactivity	Acids. Amines. 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	Avoid contact with the following materials: Strong oxidising agents. Strong acids. Amines.	
10.6. Hazardous decompositi	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. Vapours/gases/fumes of: Acids - organic. Aldehydes.	
SECTION 11: Toxicological in	Iformation	

#### 11.1. Information on toxicological effects

Inhalation	No significant hazard at normal ambient temperatures. Heating may generate the following products: Irritating gases or vapours.
Ingestion	Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.
Skin contact	Irritating to skin. May cause sensitisation by skin contact. The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	Irritating to eyes.
Acute and chronic health hazards	The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

#### **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

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	Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground.
12.5. Results of PBT and vPvB	3 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 conside	erations
13.1. Waste treatment method	S
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 inform	nation
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	9
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(e	is)
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	
IMDG packing group	III

ICAO packing group

#### 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

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

(E)

#### 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

Revision date	15/05/2015
Revision	18
Supersedes date	04/12/2014
Risk phrases in full	R36/38 Irritating to eyes and skin. R43 May cause sensitisation by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard statements in full	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.

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.