

**1 Identification Of The Substance/Preparation and Company/Undertaking**

Name of preparation: Ultracrete PY4/5 – Polyester Resin Mortar  
 Company name: Instarmac Group plc  
 Address: Kingsbury Link, Trinity Road, Tamworth, B78 2EX  
 Tel. No.: 01827 872244

Emergency Tel. No: 07971 217 347

**2 Composition/Information on Ingredients Chemical Description:**

Unsaturated polyester resin in styrene.

Ingredient	EINECS	ELINC	CAS	Classification	Content	Risks
Styrene	601-026.00.0	90-492	100-42-5	Irritant (Xi)	42-46%	R36/38

**3 Hazards Identification****Irritant**

Flammable, may cause fire, irritating to the eyes, may cause sensitisation by skin contact.

**4 First-Aid Measures**

**General:** Take off all contaminated clothing immediately. Show this safety data sheet to the doctor in attendance.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. Obtain medical attention.

**Skin Contact:** Wash immediately with plenty of water. Consult a physician if necessary.

**Eye Contact:** Rinse immediately with plenty of clean water for at least 15 minutes. Keep eye wide open whilst rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth, (Never give anything by mouth to an unconscious person.) Call physician immediately. Keep ward and in quiet place.

Eye wash station or means of irrigation should be readily available.

**5 Fire-Fighting Measures****Extinguishing media:****Suitable extinguishing**

**media:** Dry powder, foam, sand.

**Unsuitable extinguishing**

**media:** None. Water may be ineffective.

**Special exposure hazards arising from combustion including gaseous by-products:**

Thermal decomposition can lead to release of irritating gases and vapours.

**Special protective equipment**

**for fire fighters:** In the event of fire, wear self contained breathing apparatus.

**Specific Methods:** Standard procedure for chemical fires. Cool containers/tanks with water spray.

**6 Accidental Release Measures**

**Personal Precautions:** Use personal protective equipment. Keep people away from and upwind of spill/leak.

**Environmental precautions:** In accordance with local authority, regulations do not allow material into water courses and drains, avoid sub-soil penetration.

**Methods for Cleaning up:** Soak up with inert absorbent material. Shovel into suitable container for disposal. After cleaning, flush away traces with water.

**Exposure controls/Personal protection Refer to section 8**

**Disposal Considerations:** Should be disposed in accordance with control of Pollution act 1974, Environmental Protection Act 1990 and local authority regulations.

**7 Handling and Storage**

**Handling:** Use only in area provided with appropriate exhaust ventilation.

**Storage:** Store in a dry place in temperature below 30°C. Store in dark away from oxidising materials..

**8 Exposure controls/personal protection**

**Exposure limit values:**

**Chemical Name:** Styrene

**National Exposure Limits:** MEL: 100 ppm (8 hour ref. Period) 250 ppm (15 min ref. Period)

**Engineering controls:** Ensure adequate ventilation, especially in contained areas.

**Occupational exposure controls**

**Respiratory protection:** In case of insufficient ventilation wear suitable respiratory equipment. A risk assessment may be required.

**Hand protection:** PVC or other plastic material gloves.

**Eye protection:** Wear face shield.

**Skin protection:** Chemical resistant apron, protective suit, safety shoes/boots.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls:** Do not allow product to enter water courses or drains, dispose of surplus material and packaging in accordance with local authority regulations.

**9 Physical and chemical properties**

<b>General Information:</b>	Appearance:	Liquid
	Colour:	Yellow/brown
	Odour:	Of Styrene
	Flash point;	32°C
	Relative density:	(25°C) = 1.05 – 1.15
	Solubility:	Water solubility immiscible
	Viscosity;	(25°C) = 1400 – 1600 mPa.s
	Boiling point/boiling range;	N/D
	Melting point:	N/D
	Flammability (solid/gas);	N/D
	Auto ignition:	N/D
	Explosive properties;	N/D
	Explosion limits:	N/D
	Oxidising properties;	N/A
	Vapour pressure;	N/D
	Bulk density:	N/D
	pH;	N/D
	Partition coefficient:	N/D
	n-octanol/water	N/D
	Active oxygen content	N/D
	Peroxide content:	N/D
	SADT	N/D
	Specific conductivity:	N/D

**10 Stability and reactivity****Conditions to avoid:** Do not freeze.**Stability:** Stable**Materials to avoid:** Strong oxidising agents.**Hazardous decomposition products:** None under normal use. Thermal decomposition can lead to release of irritating gases and vapours.**Need for and the presence of stabilisers:** N/A**Possibility of hazardous exothermic reaction:** N/A**Safety significance, if any of change in physical appearance of the material:** N/D/A**Possibility of degradation to unstable products:** N/D/A**11 Toxicological information****Acute toxicity:** N/D/A**12 Ecological information****Ecotoxicity:** N/D/A**Mobility:****Persistence & degradability:****Bio-accumulative potential:****Other adverse affects:****Bacteria:****Fate degradation biotic:****13 Disposal**

Dispose of as special waste in compliance with local and national regulations.

**Considerations:****Contaminated****Packaging:** Empty containers should be taken for local recycling, recovery or waste disposal.**14 Transport information:** ADR class: 3 31°C

UN Number: 1866

HI/UN No: 1866

Trem Card: 30G35

**Proper shipping name:** Resin Solution**Sea transport (IMDG-code / IMO)**

IMO Class 3

IMDG Page:

UN/ID: 1866

EMS: 3-05

MFAG:

**Proper shipping name:** Resin Solution**Air transport (ICAO-TI/IATA=DGR)****ICAO-TI/ATA-DGR** UN/ID No 1866

Class 3

**Proper shipping name:** Resin Solution



<b>15 Regulatory information:</b>	Classification:Xi Irritant
<b>R Phrases:</b>	R10 Flammable. R20 Harmful by inhalation R36/38 Irritating to skin and eyes.
<b>S Phrases:</b>	S2 Keep out of the reach of children. S13 Keep away from food and drink and animal feed stuffs. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S46 If swallowed, seek medical advice immediately and show this container label. S51 Use only in well ventilated areas.

## 16 Other Information

<b>Training advise:</b>	If any further information is required contact Instarmac Group plc
<b>Recommended restrictions on use:</b>	Should always be used in accordance with material data sheet.
<b>Further Information:</b>	(written references and/or technical contact point); Contact Instarmac Group for further information.
<b>Sources of key data used to compile the data sheet:</b>	Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 The Compilation of Safety Data Sheets (Third Edition) Control of Substances Hazardous to Health (Regulations) 1998 Manual Handling Operation Regulations 1992 Information collated from raw materials suppliers. EH40/2002

Users of products supplied by Instarmac Group plc should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied to Instarmac Group plc's general conditions of sale.

**1 Identification Of The Substance/Preparation and Company/Undertaking**

Name of preparation: Ultracrete PY4/5 – Polyester Resin Mortar Accelerator  
 Company name: Instarmac Group plc  
 Address: Kingsbury Link, Trinity Road, Tamworth, B78 2EX  
 Tel. No.: 01827 872244

Emergency Tel. No: 07971 217 347

**2 Composition/Information on Ingredients Chemical Description:**

Consists of a mixture of silica sand with inorganic fillers with small quantities (<1%) of organic individual additives present.

Ingredient	EINECS	ELINC	CAS	Classification	Content	Risks
Dibenzoylperoxide 20% powder with inert fillers	202-327-6	N/D	94-36-0	Irritant (Xi)	>4%	R2, R36, R43
Calcium Sulphate	231-900-3	N/D		None		
Other Inorganic Fillers (including Silica Sand)	238-878-4	-	14808-60-7	None	>97%	R37

**3 Hazards Identification****Irritant**

May cause fire, irritating to the eyes, may cause sensitisation by skin contact. Prolonged exposure to dust may have the following effects:

Long term irreversible effects from inhalation of respirable crystalline silica.

**4 First-Aid Measures**

**General:** In all cases of doubt, or when symptoms persist, seek medical attention.

**Inhalation:** Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Move to fresh air. If symptoms persist, seek medical advice.

**Skin:** Wash immediately with soap and water.

**Eye Contact:** Rinse thoroughly with plenty of clean water. Eyelids should be held away from eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

**Ingestion:** Do not induce vomiting because of risk of aspiration, wash mouth out with water, seek medical advice.

Eye wash station or means of irrigation should be readily available.

**5 Fire-Fighting Measures****Extinguishing media:**

**Suitable extinguishing media:**

Water, foam and fire extinguishing powders are suitable.

**Unsuitable extinguishing media:**

Halones, Carbon dioxides

**Special exposure hazards arising from combustion including gaseous by-products:**

Carbon dioxide, benzoic acid, benzene, phenyl benzoate.

**Special protective equipment for fire fighters:**

N/A

**6 Accidental Release Measures**

**Personal Precautions:** Wearing suitable personal protection (dust masks, gloves and goggles) as per section 8, recover spillage in dry state, if possible avoiding dust formation.

**Environmental precautions:** In accordance with local authority, regulations do not allow material into watercourses and drains.

**Methods for cleaning up:** Try to avoid build up of dust where possible. Vacuum removal if available is the most suitable. If product is hydrated, mechanical aids may be required to reduce manual handling risks.

**Exposure controls/Personal protection Refer to section 8**

**Disposal Considerations:** Should be disposed in accordance with Control of Pollution Act 1974, Environmental Protection Act 1990 and local authority regulations.

**7 Handling and Storage**

**Handling:** Should use in a well-ventilated area. Keep product and empty container away from sources of ignition. Avoid dust generation. Never bring peroxide into direct contact with accelerator during processing. Weigh out and add peroxide separately

**Storage:** Store in a dry place in temperature between 5°C – 25°C. Protect from frost.

**8 Exposure controls/personal protection****Exposure limit values:**

Dibenzoylperoxide OES-TWA 5.0 mg/m<sup>3</sup>

Calcium Sulphate In this country no exposure limit has been established.

Silica Sand UK EH40: MEL 0.3mg/m<sup>3</sup> TWA. As SiO<sub>2</sub> Crystalline dust respirable.

**Engineering controls:** Explosion proof ventilation recommended. Avoid the creation of dust.

**Occupational exposure controls**

**Respiratory protection:** Use dust mask which will resist respirable dust, set out in the MSDS as per exposure limits in well-ventilated area. (Always follow dust mask manufacturers instructions and ensure exposure limit is not beyond the tolerance of the mask). If using in low atmosphere or poorly ventilated area consider use of respirator. A risk assessment may be required.

**Hand protection:** Impermeable or rubber based gloves made of neoprene or synthetic rubber capable of prevention of contact with skin should be worn. Glove must possess enough durability to prevent dermal exposure during the specific application (a risk assessment may be required.) If contact with skin occurs wash immediately with water. See Section 4

**Eye protection:** Wear chemical goggles/face protection, dust proof goggles should be worn whenever there is risk of powder or water/powder mixture entering the eye.

**Skin protection:** Avoid all skin contact. Wear full length overalls to protect skin from splashes, remove all contaminated clothing and launder before re-use if contact with skin occurs consult section 4. The usual precautionary measures for handling chemicals should be observed. Wash skin with water immediately after any contact with this product as per section 4.

**Environmental exposure controls:** Do not allow product to enter water courses or drains, dispose of surplus material and packaging in accordance with local authority regulations.

**9 Physical and chemical properties**

<b>General Information:</b>	Appearance:	Free flowing powder
	Odour:	Faint
	Important health, safety and environmental information	
	Boiling point/boiling range;	Do not distil (decomposes)
	Melting point:	Not relevant
	Flash point;	Above the SADT value
	Flammability (solid/gas);	Not determined
	Auto ignition:	>308°C
	Explosive properties;	N/A
	Explosion limits:	N/A
	Oxidising properties;	N/A
	Vapour pressure;	N/D
	Density:	2290 kg/m <sup>3</sup> (20°C)
	Bulk density:	588 kg/m <sup>3</sup> (20°)
	Solubility:	Insoluble
	pH;	Neutral character
	Partition coefficient: n-octanol/water	N/D
	Relative vapour density (air=1):	N/D
	Viscosity;	N/A
	Active oxygen content	1.32%
	Peroxide content:	20%
	SADT	70°C
	Specific conductivity:	N/D

**10 Stability and reactivity**

**Conditions to avoid:** A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by direct contact with incompatible substances or by thermal decomposition at and above the following temperatures: 70°C,

**Materials to avoid:** Use only stainless steel 316, PVC, polythene or glass lined equipment.

**Hazardous decomposition products:** Contact with incompatible materials such as acids, alkalis, heavy metals and reducing agents will result in hazardous decomposition. Avoid contact with rust. Do not mix with peroxide accelerators. Do not mix with reducing agents.

**Need for and the presence of stabilisers:** N/A

**Possibility of hazardous exothermic reaction:** N/A

**Safety significance, if any of change in physical appearance of the material:** Potency of irritation increases during mixing with water and before curing.

**Possibility of degradation to unstable products:** N/D

**11 Toxicological information**

<b>Acute toxicity:</b>	Oral: LD50 rat: >5000mg/kg Inhalation: LD50 rat: >24.3mg/l; 4 hours exposure time max attainable concentration.
<b>Irritation</b>	Skin: The degree of irritation was sufficient to warrant labelling as a skin irritant.
<b>Eye:</b>	Irritating to the eyes (5 minutes exposure time).
<b>Respiratory Tract:</b>	N/D
<b>Repeated-dose toxicity:</b>	Repeated exposure in excess of the OES has been linked with Rhinitis, coughing and silicosis. Skin exposure has been linked to allergic (chromium) dermatitis and/or burns. Allergic dermatitis more commonly arises from contact with cement/water mixture than dry cement.
<b>Mutagenicity:</b>	N/A
<b>Carcinogenicity:</b>	N/A
<b>Reproductive toxicity (fertility, developmental).</b>	N/A

**12 Ecological information**

<b>Ecotoxicity:</b>	Fish: Acute toxicity, 96h-LC50 = 2.0 mg/l (Poe cilia reticulata).
<b>Mobility:</b>	N/A
<b>Persistence &amp; degradability:</b>	N/A
<b>Bio-accumulative potential:</b>	N/A
<b>Other adverse affects:</b>	The addition of cements to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.
<b>Bacteria:</b>	Activated sludge respiration inhibition test EC50 = 35mg/l
<b>Fate degradation biotic:</b>	This product is resistant to biodegradation

**13 Disposal**

<b>Considerations:</b>	Dispose of empty containers or surplus product to a place authorised to accept builder's waste. Keep out of reach of children. Observe local/state/federal regulations.
------------------------	---

**14 Transport information:**

	ADR class not restricted.	ADR item No not relevant
	RID class not restricted	RID item No not relevant
	Trem card not relevant	UN Number none
<b>Proper shipping name:</b>	Not dangerous good according to national and international transport regulations.	
<b>Sea transport (IMDG-code / IMO)</b>		
	IMO/IMDG Code not restricted	Class not restricted
	Packing group not relevant	UN No none
	EMS not relevant	MFAG
	Marine pollutant no	
<b>Proper shipping name:</b>	Not dangerous good according to national and international transport regulations.	
<b>Air transport (ICAO-TI/IATA=DGR)</b>		
<b>ICAO-TI/ATA-DGR</b>		UN No none
	Class not restricted	Packing group not relevant
<b>Proper shipping name:</b>	Not dangerous good according to national and international transport regulations.	

**15 Regulatory information:**

Classification:	Xi Irritant
R2	Risk of explosion by shock, friction, fire or other sources of ignition
R36	Irritating to Eyes.
R43	May cause sensitisation by skin contact.
S3/7	Keep container tightly closed in a cool place.
S14	Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal sops).
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing/suitable gloves and eye/face protection
S50	Do not mix with peroxide accelerators or reducing agents.

**16 Other Information**

<b>Training advise:</b>	If any further information is required contact Instarmac Group plc
<b>Recommended restrictions on use:</b>	Should always be used in accordance with material data sheet.
<b>Further information:</b>	(written references and/or technical contact point); Contact Instarmac Group for further information.
<b>Sources of key data used to compile the data sheet:</b>	Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 The Compilation of Safety Data Sheets (Third Edition) Control of Substances Hazardous to Health (Regulations) 1998 Manual Handling Operation Regulations 1992 Information collated from raw materials suppliers. EH40/2002

Users of products supplied by Instarmac Group plc should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH).

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied to Instarmac Group plc's general conditions of sale.