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	Classific ation	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 al 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.

Accidental Release Measures

Personal Precautions: Use personal protective equipment. Keep people away from and upwind of

spill/leak.

In accordance with local authority, regulations do not allow material into water Environmental

-courses and drains, avoid sub=soil penetration. precautions:

Methods for Soak up with inert absorbent material. Shovel into suitable container for disposal.

After cleaning, flush away traces with water. Cleaning up:

Exposure controls/Personal protection Refer to section 8

Should be disposed in accordance with control of Pollution act 1974, Disposal

Considerations: Environmental Protection Act 1990 and local authority regulations.

Handling and Storage

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

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

materials..

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)

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

Occupational exposure controls

In case of insufficient ventilation wear suitable respiratory equipment. A risk Respiratory protection:

assessment may be required.

PVC or other plastic material gloves. Hand protection:

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 Do not allow product to enter water courses or drains, dispose of surplus material

and packaging in accordance with local authority regulations. exposure controls:

Physical and chemical properties

General Information: Appearance: Liquid

> Colour: Yellow/brown Odour: Of Styrene Flash point; 32°C

Relative density: $(25^{\circ}C) = 1.05 - 1.15$

Solubility: Water solubility immiscible Viscosity; $(25^{\circ}C) = 1400 - 1600 \text{ mPa.s}$

N/D

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 N/D pH; Partition coefficient: N/D n-octanol/water N/D N/D Active oxygen content Peroxide content: N/D SADT N/D Specific conductivity:

10 Stability and reactivity

Conditions to avoid: Do not freeze.

Stability: Stable

Materials to avoid: Strong oxidising agents.

Hazardous None under normal use. Thermal decomposition can lead to release of irritating

decomposition products: 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-accumalative 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



15 Regulatory information: Classification:Xi Irritant

R Phrases: R10 Flammable.

R20 Harmful by inhalation R36/38 Irritating to skin and eyes.

S Phrases: 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.

If swallowed, seek medical advice immediately and show this

container label.

Use only in well ventilated areas.

16 Other Information

Training advise: If any further information is required contact Instarmac Group plc

Recommended

restrictions on use: Should always be used in accordance with material data sheet.

Further information: (written references and/or technical contact point); Contact Instarmac Group for

further information.

Sources of key data used to compile

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 The

Compilation of Safety Data Sheets (Third Edition) Control of Substances

the data sheet: 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	Classific ation	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 In accordance with local authority, regulations do not allow material into

precautions: watercourses and drains.

Methods for Try to avoid build up of dust were possible. Vacuum removal if available is the most cleaning up: 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 Should be disposed in accordance with Control of Pollution Act 1974,

Considerations: Environmental Protection Act 1990 and local authority regulations.

7 Handling and Storage

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 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/m³

Calcium Sulphate In this country n exposure limit has been established.

Silica Sand UK EH40: MEL 0.3mg/m³ TWA. As SiO² 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 Do not allow product to enter water courses or drains, dispose of surplus material

exposure controls: and packaging in accordance with local authority regulations.

Physical and chemical properties

General Information: 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

2290 kg/m³ (20°C) Density: Bulk density: 588 kg/m³ (20°) Solubility: Insoluble

pH; Neutral character

Partition coefficient: N/D

n-octanol/water

Relative vapour density (air=1): N/D Viscosity; N/A 1.32% Active oxygen content 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.

Contact with incompatible materials such as acids, alkalies, heavy metals and Hazardous

decomposition products: 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

Acute toxicity: Oral: LD50 rat: >5000mg/kg

Inhalation: LD50 rat: >24.3mg/l; 4 hours exposure time max attainable

concentration.

Irritation Skin: The degree of irritation was sufficient to warrant labelling as a skin

irritant.

Eye: Irritating to the eyes (5 minutes exposure time).

Respiratory Tract: N/D

Repeated-dose toxicity: 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 dermitis more commonly arises from contact with

cement/water mixture than dry cement.

Mutagenicity: N/A Carcinogenicity: N/A

Reproductive toxicity (fertility, developmental). N/A

12 Ecological information

Ecotoxicity: Fish: Acute toxicity, 96h-LC50 = 2.0 mg/l (Poe cilia reticulata).

Mobility: N/A
Persistence & degradability: N/A
Bio-accumalative potential: N/A

Other adverse affects: The addition of cements to water will, however, cause the pH to rise and may

therefore be toxic to aquatic life in some circumstances.

Bacteria: Activated sludge respiration inhibition test EC50 = 35mg/l

Fate degradation biotic: This product is resistant to biodegration

13 Disposal Dispose of empty containers or surplus product to a place authorised to accept

Considerations: 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

Proper shipping name: Not dangerous good according to national and international transport

regulations.

Sea transport (IMDG-code / IMO)

IMO/IMDG Code not restricted Class not restricted

Packing group not relevant UN No none EMS not relevant MFAG

Marine pollutant no

Proper shipping name: Not dangerous good according to national and international transport

regulations.

Air transport (ICAO-TI/IATA=DGR)

ICAO-TI/ATA-DGR UN No none

Class not restricted Packing group not relevant

Proper shipping name: 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

Do not mix with peroxide accelerators or reducing agents.

16 Other Information

Training advise: If any further information is required contact Instarmac Group plc

Recommended

restrictions on use: Should always be used in accordance with material data sheet.

Further information: (written references and/or technical contact point); Contact Instarmac Group for

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