

CTM POTTERS SUPPLIES

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information:

Product Name : Zirconium Silicate (Zirc 5)
Chemical Name : Zirconium Silicate
Synonyms : Zircon
Company : CTM Potters Supplies
Unit 10A, Millpark Industrial Estate
White Cross Road
Woodbury Salterton
Nr. Exeter
EX5 1EL
Telephone : 01395-233-077
Fax : 01395-233-905

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	EC Number	% of composition
Zircon	14940-68-2	2390196	>99

3. HAZARD IDENTIFICATION

Inhalation: Excessive exposure may cause symptoms of chronic lung disease.
Ingestion: The product is of low solubility in body fluids and it is likely to be of low toxicity.
Eyes: May cause physical irritation and inflammation.
Skin: The material is not a primary irritant, but as with any abrasive powder it may give rise to minor irritation.

Please note Zircon is a minor radioactive hazard. See sections 11 and 15.

4. FIRST AID MEASURES

General Recommendations:

Inhalation: Remove patient to fresh air, loosen tight clothing and seek medical attention.
Ingestion: Do not induce vomiting. Seek medical advice.
Eyes: Wash immediately with copious amounts of water.
Skin: Wash affected areas with water.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Those suitable for surrounding fire conditions.
Special exposure hazards: None
Protective personal equipment: None other than those suitable for the surrounding fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Leaks & Spills:	Use suitable vacuum equipment where reasonably practicable. Otherwise, damp down and scoop into a receptacle.
Personal protective equipment:	Respiratory protective equipment.

7. HANDLING AND STORAGE

Handling:	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the material.
Storage:	Store in dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is normally recommended.
Personal protective equipment:	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls are recommended for prolonged contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Form:	powder
Colour:	white
Odour:	odourless
Flash point (°C):	N/A
Flammability:	N/A
Explosive properties:	Non-explosive
Oxidising properties:	None
Specific gravity:	4.6
pH value:	7 (insoluble in water)
Melting point (°C):	1700°C

10. STABILITY AND REACTIVITY

Chemical stability:	The material is stable.
Conditions/materials to avoid:	None known
Hazardous decomposition products:	None known
Hazardous polymerization products:	None

11. TOXICOLOGICAL INFORMATION

Acute toxicology:	LD50 Oral:	>2000mg/kg
	LD50 Dermal:	Not known
	LD50 inhalation:	Not known

Health effects: Prolonged or repeated exposure above Occupational Exposure Standards may cause fibrosis of the lungs.

Zircon contains small amounts of thorium and uranium and is classified as a radioactive substance by the ionising radiations regulations 1985.

Specific activity is typically 0.7 Bq/g for Th²³², 3 Bq/g for U²³⁸.
Measured dose rates are typically as follows:

At the surface of a bag of sand	3.0 uSv/hr
At the surface of a heap of sand	4.5 uSv/hr
At 0.5m distance from that heap	2.0 uSv/hr

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not known.
Persistence:	The material is chemically stable and will persist in the environment.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with current waste disposal regulations (for UK – Control of Pollution (Special Waste) Regulations 1980). Landfill is the most appropriate method.

14. TRANSPORT INFORMATION

UN/SI No.		Not classified
UN Class		Not classified
Packing Group		Not classified
Road	UK	Not classified
	ADR	Not classified
Sea	IMO	Not classified
Air	ICAO	Not classified

15. REGULATORY INFORMATION

EC Supply Labelling:	Non hazardous
R-Phrases:	None
S-Phrases:	Optional for dusty powders S20/21 when using do not eat, drink or smoke. S38 in case of insufficient ventilation wear suitable respiratory equipment.
UK Occupational exposures limits*:	Mg/m ³ 8 hr TWA % in product.
Dusts -	
Total inhalable	10
Total respirable	5
	6
Dusts due to Th and U	1.3

*Refer to HSE Guidance note EH40

In accordance with HSE Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitute the user's assessment of workplace risk.

16. OTHER INFORMATION**References:**

COSHH ACOP	HSC approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994
CHIP 96	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996
CHIP SDS ACOPS	HSC Approved Code of Practice for Safety Data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40	HSE Guidance note EH40 on Occupational Exposure Limits to be used in conjunction with the COSH regulations.

Further information:

Data sheet producing department: CTM Potters Supplies
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Disclaimer:

The information contained in this safety data sheet has been prepared using the best available information, however in view of technical developments, this may alter. The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards. Due to the many factors outside our control when using this product, we cannot accept liability for any injury, accident, loss or damage caused through its use.