



MATERIAL SAFETY DATA SHEET
(cosh124)

1. Identification of the preparation/Supplier reference

Trade Name **RM1323** ZIRCONIUM SILICATE

Chemical name Zirconium silicate

Synonyms Zircon

Supplier Scarva Pottery Supplies, Unit 20, Scarva Rd Ind Estate,
Banbridge, Co Down, BT32 3QD

Emergency numbers (+44) 028 4066 9699
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2. Composition

Component	CAS	EINECS	% of composition
Zirconium Silicate	14940-68-2	239-019-6	95-100

3. Health 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

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	Suitable for surrounding fire conditions
Special Exposure	None hazard
Personal protective equipment	None other than required for 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 & 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 Control/Personal protective Equipment

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 & Chemical properties

Appearance & Odour	White powder, odourless
Flash point (°C)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	None
Specific gravity	4.6
pH value	7 (insoluble in water)
Melting point (°C)	1700° C

10. Stability & Reactivity

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

11. Toxicology 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.

Grade of zircon supplied by POTTERYCRAFTS has a particularly small percentage of thorium (Th) and Uranium (U).

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 product is chemically stable and will persist in the environment

13. Disposal

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
Dusts - total inhalable	10	
Dust - 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

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Footnote

LIABILITY

Such information is the best of Scarva Pottery Supplies knowledge and belief accurate at the date of publication, which is the date generated automatically on the day of printing of this document. However, no representation, warranty of guarantee is made as to its accuracy, reliability of completeness. It is the user's responsibility to satisfy itself as to the suitability and completeness of such information for their own particular use.

THIRD PARTY MATERIALS

Insofar as materials not manufactured or supplied by Scarva Pottery Supplies are used in conjunction with, or instead of Scarva Pottery Supplies materials, it is the responsibility of the customer itself to obtain from the manufacturer or supplier all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Scarva Pottery Supplies materials in conjunctions with other materials.

17. National Legislation

UK Legislation

SI1993/1746 Chemicals (Hazard Information and Packaging) Regulations 1993

Environmental Protection (Duty of Care) regulations 1992 SI 2839

Carriage of Dangerous goods by Road and Rail Regulations 1994

Control of pollution Act 1974

Environmental Protection Act 1990

Highly Flammable Liquids and Petroleum Spirit Regulations 1972

EH40 Occupational Exposure Limits

SI1988/1657 The Control of Substances Hazardous to Health Regulations

Note - This is not an exhaustive list and users should satisfy themselves that they comply with all relevant National Regulations