



# CERMATCO LTD

## PRODUCT HEALTH AND SAFETY DATA

DATA SHEET NO.	ZS/HSO/1
DATE ISSUED	14/01/2009
NO.OF PAGES	4

### 1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME	Cermatco Zircon
ADDITIONAL INFO	www.cermatco.com

Contact Manufacturer  
Cermatco Ltd  
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Cooting Road  
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UK

### 2. HAZARDS IDENTIFICATION

Emergency Overview	Non-combustible
Eye Contact	Normal problems caused by inert particulate matter
Skin Contact	May cause irritation
Inhalation	No known effects other than respiratory irritation
Ingestion	None known
Classification	Not dangerous
Aggravated medical conditions	Asthma, lung irritation, dermatitis

### 3. COMPOSITION / INFORMATION OF INGREDIENTS

CHEMICAL NAME	Zirconium Silicate	
	M.E.L. (mg per cbm)	O.E.S. (mg per cbm)
COMPOSITION		
Stable compound of zirconia (ZrO <sub>2</sub> ) and silica (SiO <sub>2</sub> ) with minor amounts of TiO <sub>2</sub> , Fe <sub>2</sub> O <sub>3</sub> , Al <sub>2</sub> O <sub>3</sub> , P <sub>2</sub> O <sub>5</sub> , Th, U etc.	N/A (See below)	N/A (See below)
MINERALOGY		
Major component – Zirconium Silicate (ZrSiO <sub>4</sub> )	N/A (See below)	N/A (See below)

#### 4. FIRST AID MEASURES

<b>Primary routes of body entry</b>	Over-Exposure, Acute & Chronic Effects	First Aid & Medical Information
<b>Inhalation</b>	No known effects other than respiratory irritation	Remove from exposure
<b>Ingestion</b>	None known.	None applicable
<b>Skin contact</b>	None known, fine powders may dry the skin. In some cases sharp grains could abrade the skin.	General first aid procedures.
<b>Skin absorption</b>	Not applicable.	Not applicable.
<b>Eye</b>	Normal problems caused by inert particulate matter.	Do not rub, irrigate well, seek medical advice if matter not removed.
<b>Other potential health risks, e.g. Synergistic Reactions</b>	None known.	Not applicable.
<b>Toxicity</b>	None known to date but low to non-existent.	Not applicable.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash point</b>	N/A	<b>Extinguishing media</b>	Not a fire hazard
<b>Special fire fighting procedure</b>	N/A	<b>Explosion potential</b>	None. Normal very fine dust explosion risk - no recorded occurrence.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	<b>Wear personal protective equipment Avoid dust formation</b>
<b>Environmental precautions</b>	<b>No special environmental precautions required</b>
<b>Methods for clean-up</b>	<b>Collect in suitable container for disposal</b>

#### 7. HANDLING & STORAGE

<b>Normal packing method</b>	Grain and fines packed in paper sacks or I.B.C's with or without wooden pallets.
<b>Normal use</b>	Normal ceramic or refractory applications
<b>Procedures in event of spillage</b>	Retrieval by means of vacuum is recommended to avoid creation of nuisance dust.
<b>Waste disposal</b>	Inert grains and powders may be dumped as non-hazardous waste
<b>Special handling precautions</b>	None.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

This material has not been assigned specified Occupational Exposure (O.E.L.) under COSHH and with no indication of a need for a lower value, personal exposure should be kept below 10mg per cbm 8 hour T.W.A. for "total inhalable dust"<sup>1</sup> or below 5 mg per cbm 8 hour T.W.A. for "respirable dust"<sup>1</sup>. Such or larger dust concentrations would be taken as "substantial concentrations" and such are substances hazardous to health.

T.W.A. = Time Weighted Average.

<sup>1</sup> See MDHS 14: General methods for the gravimetric determination of respirable and total inhalable dust. ISBN 0 7176 03431

## PERSONAL PROTECTION REQUIREMENTS

<b>Respiratory protection</b>	Personal dust masks suitable for nuisance dust.
<b>Ventilation</b>	As dictated by process to minimise nuisance dust.
<b>Protective gloves</b>	Advisable in cases where skin drying could occur.
<b>Eye protection</b>	Advisable to prevent ingress of dust into eyes.
<b>Other equipment</b>	Advisable to wear safety footwear when handling palletised loads.

## PRECAUTIONS TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT WITH WHICH THIS MATERIAL HAS BEEN IN CONTACT:

Normal hygiene standards and use of personal safety equipment such as dust masks and eye protection.

## 9. PHYSICAL & CHEMICAL PROPERTIES

### PHYSICAL DATA

<b>Boiling Point</b>	N/A	<b>Solubility-water</b>	Nil
<b>Melting Point</b>	> 1700°C	<b>Solubility-alcohol</b>	Nil
<b>Vapour pressure</b>	N/A	<b>Solubility-others</b>	Minor in Hydrofluoric acid
<b>Vapour density</b>	N/A	<b>Appearance</b>	Off white grains and powders
<b>Specific gravity</b>	4.60	<b>Odour</b>	None

## 10. STABILITY & REACTIVITY

<b>Stability</b>	Stable up to very high temperature
<b>Polymerisation</b>	Unknown
<b>Incompatible with</b>	None known
<b>Decomposition Products</b>	None
<b>Conditions to be avoided</b>	None

## 11. TOXICOLOGICAL INFORMATION

### Local Effects

<b>Skin irritation</b>	May cause skin irritation
<b>Eye irritation</b>	May cause eye irritation
<b>Inhalation</b>	May cause respiratory tract irritation
<b>Ingestion</b>	None known

### Long Term Effects

<b>Skin irritation</b>	None known
<b>Eye irritation</b>	None known
<b>Inhalation</b>	None known
<b>Ingestion</b>	None known

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity effects</b>	Not water endangering
<b>Additional ecological information</b>	No information available

## 13. DISPOSAL CONSIDERATIONS

<b>Waste disposal method</b>	Dispose of in accordance with local regulations
<b>Contaminated packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal
<b>Further information</b>	Can be land-filled, when in compliance with local regulations

## 14. TRANSPORT INFORMATION

Not classed as hazardous for transport.

**15. REGULATORY INFORMATION**

Not classed as hazardous for supply.

**16. OTHER INFORMATION**

**OTHER INFORMATION** - None available.

**NOTE:**

The above information is believed to be correct at the date of publication. Any further information on the safety aspects of our products will be supplied as and when this becomes available.

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**An ISO 9001:2000 Company**