

**1. Identification of the Substance/Preparation and Company**

Product name:

**Ceramite<sup>®</sup> BCR/BCA -series***(BCR, BCR-B, BCR-S, BCR-SB, BCR-F1, BCR-F, BCA, BCA-B)*

Application of Ceramite:

Industrial wear and heat protection.

Address/Phone No.:

**Elkem AS****Materials**

P.O. Box 8126 Vaagsbygd

N-4675 Kristiansand S., Norway

Telephone: + 47 38 01 75 00

Telefax: + 47 38 01 75 95

[www.materials.elkem.com](http://www.materials.elkem.com)e-mail: [ceramite.materials@elkem.no](mailto:ceramite.materials@elkem.no)

Contact person:

Arne Skagen, e-mail: [arne.skagen@elkem.no](mailto:arne.skagen@elkem.no)

Emergency Phone No.:

Not applicable

**2. Hazards Identification**

The product does not represent a hazard to health, safety or environment when handled and stored as advised. See section 7.

**3. Composition/Information on Ingredients**

Synonyms:

Proprietary castable

Constituents:	Weight %	CAS No.:	Einecs No.	Hazard label	R/S-phrases
Aluminium oxide (Al <sub>2</sub> O <sub>3</sub> )	50 -70	1344-28-1	215-691-6	-	-
Silicon carbide (SiC)*	15 -25	409-21-2	206-991-8	-	-
Silicon dioxide (SiO <sub>2</sub> ), - amorphous fume	5 -15	69012-64-2	273-761-1	-	-
Other mineral oxides	Balance	-	-	-	-

\* The product may contain small amounts of crystalline silicon dioxide (< 0.1 %).

#### 4. First Aid Measures

Inhalation:	Irritation/dehydration caused by dust: Fresh air. See a physician on persistent feeling of discomfort.
Skin contact:	Wash contaminated skin with water and/or mild detergent.
Eye contact:	Rinse eyes with water/saline solution. See a physician on persistent feeling of discomfort.
Ingestion:	Remove the person affected from dust-exposed area. See inhalation.

#### 5. Fire Fighting Measures

Ceramite is not combustible. Ceramite dust entails no danger of explosion.

Extinguishing media: Not applicable (If involved in fire: Cool with water).

#### 6. Accidental Release Measures

Material should be collected in suitable containers.

#### 7. Handling and Storage

Handling:	Avoid generating airborne dust.
Storage:	Keep dry in closed containers.

#### 8. Exposure Controls/Personal Protection

##### A) Occupational exposure controls:

Protective gloves, eye protection, eye flushing facilities and respiratory protection. Avoid inhalation of dust. Avoid contact with skin and eyes. Ensure good dust ventilation during use. Wear a particulate respirator according to EN 149 FFP 2S/3S in areas of inadequate ventilation.

##### Occupational Exposure Limits (HSE, EH40/2005 and amendments 2007):

Substance [CAS number]	8hr TWA		10 minute STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Aluminium oxide [1344-28-1]				
Inhalable dust	-	10	-	-
Respirable dust	-	4	-	-
Silicon carbide [409-21-2]				
Inhalable dust	-	10	-	-
Respirable dust	-	4	-	-
Silica, amorphous (SiO <sub>2</sub> )				
Inhalable dust	-	6	-	-
Respirable dust	-	2.4	-	-
Silica, crystalline (SiO <sub>2</sub> )				
Respirable dust	-	0.1 <sup>1)</sup>	-	-

<sup>1)</sup> HSC/E plans to keep this limit under review.

**B) Environmental exposure controls:**

See sections 6, 7 and 12.

Limit values ambient air (Directive 1999/30/EC):

	Averaging time	Limit value
PM <sub>10</sub> ★	24 Hrs	50 µg/m <sup>3</sup>
PM <sub>10</sub>	Calendar year	40 µg/m <sup>3</sup>

★ not to be exceeded more than 35 times a calendar year

---

**9. Physical and Chemical Properties**

Form:	Powder.
Colour:	Grey.
Odour:	None.
Solubility:	The particles are insoluble in water. Soluble in alkali hydroxides
Solubility (Organic solvents):	Insoluble.
Melting point:	1,400-1,500 °C
Bulk density:	1,750-2,000 kg/m <sup>3</sup>
Density (cured):	2,700-2,900 kg/m <sup>3</sup>
pH:	8.5 (Ceramite and distilled water ratio 1:1, after 15 minutes mixing)

---

**10. Stability and reactivity**

Conditions to avoid:

Avoid storage under wet/humid conditions. When mixing Ceramite with water, an alkaline reaction will take place before hardening.

Materials to avoid:

Strong mineral acids e.g. nitric acid (HNO<sub>3</sub>) and hydrofluoric acid (HF).

Hazardous Decomposition Product(s):

Ceramite will react with strong mineral acids (e.g. HF, HNO<sub>3</sub>) forming toxic gases (NO<sub>x</sub>, SiF<sub>4</sub>).

---

**11. Toxicological Information****Acute effects:**

INGESTION:	Dust may cause irritation and dehydration of mucous membranes.
INHALATION:	Dust may cause irritation and dehydration of mucous membranes.
SKIN CONTACT:	Dust may cause irritation and dehydration.
EYE CONTACT:	Dust may cause irritation and dehydration.

**Chronic effects:**

Inhalation of amorphous silica (CAS No. 69012-64-2) is considered to entail minimal risk of pulmonary fibrosis (silicosis). However, chronic obstructive lung-disease is suspected following long-term exposure for concentrations above the recommended exposure limits.

## 12. Ecological Information

Ceramite<sup>®</sup> is not characterised as dangerous for the environment.

MOBILITY:	The product is not mobile in the environment under normal environmental conditions.
PERSISTENCE:	Not relevant for inorganic substances.
BIOACCUMULATION:	Not relevant, due to low mobility and non-dispersive use.
ECO-TOXICITY:	LC <sub>50</sub> /LD <sub>50</sub> : Not determined. Hardly relevant for inorganic, insoluble substances.

## 13. Disposal Considerations

The material should be recovered for recycling where possible.  
Waste from the product is not considered as hazardous waste according to Commission Decisions 2000/532/EC and 2001/118/EC.  
Prior to disposal of large quantities of this material advice should be sought from the local Environment Agency Office.

## 14. Transport Information

UN	-
IMDG/IMO	Not subject to classification
ADR/RID	Not subject to classification
ICAO/IATA	Not subject to classification

## 15. Regulatory Information

Product classification and labelling:

Symbol:	Not subject to classification
R-phrases	None.
S-phrases:	None.

The text of this Safety Data Sheet is prepared in compliance with:

- Commission Directive 2001/58/EC and 1999/45/EC.

## 16. Other Information

Literature references are available upon application to the manufacturer.

Ceramite<sup>®</sup> is a registered trademark owned by Elkem AS.