

## MSDS – Carbon Elite Hard

### Section 1. Product and Company Identification

**Product Name:** Carbon Elite Hard (Potassium Densifier)  
**Product use:** Impregnating Hardener for Terrazzo and Polished Concrete  
**Effective Date:** 1 January 2020

**Supplier Information:** Carbon Diamond Abrasives  
 Unit 1, 21 Delage St  
 Joondalup, Western Australia 6027  
 Telephone number: (08) 6243 1778

**Emergency Phone Number:** Poisons Information Centre: 136 11 26

### Section 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

**GHS Classification:** Skin Irrit. 2  
 Eye Irrit. 2  
**Hazards summary** Alkaline. Irritating to eyes and skin.  
 Spilled material is slippery.

#### 2.2 Label elements

**Hazard pictogram(s)**



**Signal word(s)** Warning

**Hazard statement(s)** H315: Causes skin irritation.  
 H319: Causes serious eye irritation

**Precautionary statement(s)** P262: Do not get in eyes, on skin, or on clothing.

**Revision: GHS version:** 1

**Date of Issue:** 1 January 2020

**Date Previous Issue :** NA

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.3 Other hazards:** Dries to form glass film which can easily cut skin. Can etch glass if not promptly remove

### Section 3. Ingredients and Hazards Identification

Components				
Component	CAS #	EINECS No/REACH Registration	% by weight	Hazard Symbols
Silicic Acid, Potassium Salt	1312-76-1	215-199-1	14-30	H319: Eye Irrit 2 H315: Skin Irrit 2
Water	7732-18-5	231-791-2	Balance	No

### Section 4. First Aid Measures

**Eye Contact:** Flush eyes with water immediately while holding eyelids open. Remove contacts, if worn, after initial flushing and continue flushing for at least 15 minutes. Seek medical attention if irritation persists.

**Skin Contact:** Use soap and water to remove from the skin, remove contaminated clothing, clean thoroughly before reuse.

**Inhalation:** Move to fresh air. If not breathing, give rescue breathing. If breathing is difficult, give oxygen. Seek medical attention if breathing is still difficult.

**Ingestion:** If swallowed, wash out mouth and give 200-300mL water to drink, get medical attention immediately. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious person.

### Section 5. Fire Fighting Measures

#### 5.1 Extinguishing media:

**Suitable Extinguishing Media:** Compatible with all standard fire fighting techniques.

**Unsuitable extinguishing Media:** None known.

#### 5.2 Special hazards arising from the substance or mixture:

Not applicable. Aqueous solution. Non-combustible.

**5.3 Advice for fire-fighters:** None.

### Section 6. Accidental Release Measures

#### 6.1 Personal precautions, protective equipment, and emergency procedures

Wear suitable protective clothing. Wear eye/face protection.

#### 6.2 Environmental precautions:

Do not allow to enter drains, sewers, or watercourses. Advise authorities if spillage has entered water course or sewer or has contaminated soil / vegetation.

#### 6.3 Methods and materials for containment and cleaning up

Caution - spillages may be slippery.

Contain spillages with sand, earth, or any suitable adsorbent material.

Transfer to a container for disposal or recovery.

**6.4 Reference to other sections** See Also Section 8

### Section 7. Handling and Storage

#### 7.1 Precautions for safe handling

Avoid contact with eyes, skin and clothing. Avoid generation of mist. Provide adequate ventilation. Emergency shower and eye wash facilities should be readily available. See Also Section 8

#### 7.2 Conditions for safe storage, including any incompatibilities

Storage temperature 0-95° C. Loading temperature 45-95 ° C. Do not allow material to freeze. Provide an adequate bund wall. Unsuitable containers: Aluminum See Also Section 10.

#### 7.3 Specific end use(s)

See also Annex to the extended Safety Data Sheet

## Section 8. Exposure Control/Personal Protection

### 8.1 Control parameters

**Substance:** Silicic acid, sodium salt

**Occupational Exposure Limits:** No Occupational Exposure Limit assigned. An exposure limit of 2 mg/m<sup>3</sup> (15 min TWA) is recommended by analogy with sodium hydroxide (UK EH40).

### 8.2 Exposure controls

Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

#### 8.2.1 Appropriate engineering controls

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

#### 8.2.2 Personal Protection

**Respiratory protection** Respiratory protection not normally required. Advice on respiratory protective equipment is given in the HSE (Health and Safety Executive) publication HS(G)53.

**Skin protection** : Wear suitable protective clothing and gloves. Plastic or rubber gloves. For example EN374-3, level 6 breakthrough time (>480min). Wear suitable overalls.

#### 8.2.3 Environmental Exposure Controls

The primary hazard of sodium silicate is the alkalinity. Avoid release to the environment. eye/face protection Chemical goggles (EN 166).

## Section 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

**Appearance** Liquid. Almost colourless.

**Odour** Odourless. Odour Threshold (ppm) Not applicable.

**Molar ratio of SiO<sub>2</sub>:K<sub>2</sub>O** >3.9

**pH (Value)** Alkaline. 11-13.7

**Freezing Point (°C)** Not applicable.

**Melting Point (°C)** Not applicable.

**Boiling Point (°C)** 100

**Flash Point (°C)** [Closed cup] Not applicable.

**Evaporation rate** Not applicable.

**Flammability (solid, gas)** Not applicable.

**Explosive Limit Ranges** Not applicable.

**Vapour Pressure (mm Hg)** Not applicable.

**Vapour Density (Air=1)** No data.

**Density (g/ml)** 1.41 g/cm<sup>3</sup> (20°C), 42.0° Bé, 11.75 lbs/gal

**Solubility (Water)** Soluble.

**Solubility (Other)** No data.

**Partition Coefficient** No data.

**Auto Ignition Point (°C)** Not applicable.

**Decomposition Temperature (°C)** Not applicable.

**Viscosity (mPa. s)** Not applicable.

**Explosive properties** Not applicable.

**Oxidising Properties** Not applicable.

**9.2 Other information** No data.

## Section 10. Stability and Reactivity

**10.1 Reactivity** See Section: 10.3

**10.2 Chemical stability** Stable.

### 10.3 Possibility of hazardous reactions

When arc welding vessels containing aqueous solutions of this material, take care to control any explosion risk from hydrogen evolved by electrolysis.

Aqueous solutions will react with aluminum, zinc, tin and their alloys evolving hydrogen gas which can form an explosive mixture with air. Can react

violently if in contact with acids. Can react with sugar residues to form carbon monoxide.

**10.4 Conditions to avoid:** See Section: 10.3

**10.5 Incompatible materials** See Section: 10.3

**10.6 Hazardous decomposition product(s)** None known.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Ingestion:

All symptoms of acute toxicity are due to high alkalinity. Material will cause irritation. Oral LD50 (rat) 3400 mg/kg bw

##### Inhalation:

Mist is irritant to the respiratory tract. All symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m<sup>3</sup>

##### Skin Contact:

Material will cause irritation. Dermal LD50 (rat) >5000 mg/kg bw

##### Eye Contact:

Material will cause irritation.

##### Skin corrosion/irritation:

Irritating to skin.

##### Serious eye damage/irritation:

Irritating to eyes.

##### Sensitization:

Not sensitizing.

##### Mutagenicity:

No evidence of genotoxicity. In vitro/in vivo negative.

##### Carcinogenicity:

No structural alerts. IARC, NTP, OSHA, ACGIH do not list this product as known or suspected carcinogen.

##### Reproductive toxicity:

No evidence of reproductive toxicity or developmental toxicity.

**STOT - single exposure:** Not classified

**STOT - repeated exposure:** Not classified. NOAEL oral (rat) >159 mg/kg bw/d  
Aspiration hazard Not classified

## Section 12. Ecological Information

### 12.1 Toxicity

Fish (*Leuciscus idus*) LC50 (48 hour) >146 mg/l Aquatic invertebrates: (*Daphnia magna*) EC50 (24 hour) >146 mg/l

### 12.2 Persistence and degradability

Inorganic. Soluble silicates, upon dilution, rapidly depolymerize into molecular species indistinguishable from natural dissolved silica.

### 12.3 Bioaccumulative potential

Inorganic. The substance has no potential for bioaccumulation.

### 12.4 Mobility in soil

 Not applicable.

### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### 12.6 Other adverse effects

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

## Section 13. Disposal Considerations

**Waste Disposal Method:** Whatever cannot be saved for recovery or recycling should be managed by the local, state or Federal Regulations.

**Container Handling and Disposal:** All containers should be triple rinsed and disposed of according to local, state and Federal regulations.

## Section 14. Transport Information

**Ground Classification:**

Not classified according to the United Nations Recommendations on the Transport of Dangerous Goods'.

Not classified as hazardous under DOT or US Transport Recommendations. International Maritime

Dangerous Goods (IMDG) Code: Not classified as hazardous

**Shipping Name:** Carbon Elite Hard

**Technical Shipping Name:** None

**UNFIC:** None

**ID Number:** None

**Packaging Group:**

None **Labels:** No US

DOT Labels

**Not regulated by IATA or IMO**

## Section 15. Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA Inventory Status: Reported/Included.

AICS Inventory Status: Reported/Included.

DSL/NDSL Inventory Status: Reported/Included.

**SARA TITLE III:** Not an Extremely Hazardous Substance under §302. Not a Toxic Chemical under §313.

Hazard Categories under §§311/312: Acute

German Water Hazard Classification VwVwS: Product ID number 1314, WGK class 1 (low hazard to water).

HMIS (Hazardous Material Information System) 2,0,0

**15.2 Chemical Safety Assessment Information:** available on request.

## Section 16. Other Information

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Carbon Diamond Abrasives gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Carbon Diamond Abrasives accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

### CONTACT NUMBER FOR POISONS CENTRE

For advice, immediately contact a doctor, ambulance, or a Poison Information Centre:

Australia 13 11 26 (Australia Wide)

USA - American Association of Poison Control Centers 1-800-222-1222

Canadian Poison Centers – Ontario (24/7): Telephone: 416-813-5900; Toll free: 1-800-268-9017

UK - England and Wales: NHS 111 - dial 111;

Scotland: NHS 24 - dial 111;

Republic of Ireland: 01 809 2166

New Zealand Poisons Centre: 0800 POISON / 0800 764766