

## MATERIAL SAFETY DATA SHEET

MSDS Number: G201607006 Date of first issue: 14<sup>TH</sup>,JULY,2016

### 1 - Identification of product

|                      |                                      |
|----------------------|--------------------------------------|
| <b>Product Name:</b> | Calcium silicate insulation material |
| <b>Product Use:</b>  | Insulation materials, refractories   |

### 1.2 - Identification of Company

**Manufacturer/Supplier :** Darco Industries Pty Ltd

**20 Dobra Road, Yangebup 6164**

[www.darco.com.au](http://www.darco.com.au)

### EMERGENCY INFORMATION

TEL: +61 8 9418 8826  
MOB: N/A  
EMAIL: [sales2@darco.com.au](mailto:sales2@darco.com.au)

LANGUAGE: ENGLISH

### OPENING HOURS:

WEEKDAY: 7:00-16:00

WEEKEND: N/A

### 2. Hazard Identification

#### 2.1-Potential effect of single (Acute Over exposure)

Eye : May cause abrasions of the cornea  
Skin : May result in redness and dermatitis; prolonged exposure may cause dry skin.  
Ingestion : Single dose oral toxicity is low.  
Inhalation : Immediately remove victim to fresh air, if not breathing give artificial Respiration, if breathing give oxygen.

#### 2.2-Medical Conditions Generally Aggravated by Exposure

Medical Conditions Generally Aggravated by Exposure: The condition of individuals with lung disease (e.g. bronchitis, emphysema, chronic obstructive pulmonary disease) Can be aggravated by exposure.

### 3 - Composition / Information On Ingredients

| Component                  | Content /% | CAS Number | EC number |
|----------------------------|------------|------------|-----------|
| Silicic acid, calcium salt | 84.65      | 1344-95-2  | 215-710-8 |
| Aluminum oxide             | 2.8        | 1344-28-1  | 215-691-6 |
| Diiron trioxide            | 2          | 1309-37-1  | 215-168-2 |
| Magnesium oxide            | 1.58       | 1309-48-4  | 215-171-9 |
| Other no toxic additives   | 8.97       | mixture    | mixture   |

#### 4 - First-Aid measures

##### **Specialized First Aid and Medical Treatment Are Required For All Exposures.**

**Eyes** : Flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Seek immediate medical attention

**Ingestion** : Give one or two glasses of water or milk and induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Inhalation** : Move to fresh air. Get competent medical attention immediately. If breathing has stopped start artificial respiration and call 911 at once. An authorized person should administer oxygen to victim who is having difficulty breathing until the victim is able to breathe easily on his/her own.

Notes to Physician : Treat symptomatically.

#### 5 - Fire-fighting measures

Non-combustible products,  
Packaging and surrounding materials maybe combustible  
Use extinguishing agent suitable for surrounding combustible materials.

#### 6 - Accidental Release Measures

##### **6.1 - PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**

Where abnormally high dust concentrations occur, provide workers with appropriate protective equipment as detailed in section 8.

Restrict access to the area to a minimum number of workers required.

Restore the situation to normal as quickly as possible.

##### **6.2 - ENVIRONMENTAL PRECAUTIONS**

Prevent further dust dispersion for example by damping the materials.  
Do not flush spillage to drain and prevent from entering natural watercourses.  
Check for local regulations, which may apply

##### **6.3 - METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP**

Pickup large pieces and use a vacuum cleaner fitted with a high efficiency filter (HEPA) If brushes are used, ensure that the area is wetted down first. Do not use compressed air for clean up. Do not allow to become windblown.

#### 7 - Handling and storage

##### **7.1 - PRECAUTIONS FOR SAFE HANDLING**

Handling can be a source of dust emission and therefore the processes should be designed to limit the amount of handling. Whenever possible, handling should be carried out under controlled conditions (i.e., using dust exhaust system). Regular good housekeeping will minimise secondary dust dispersal.

##### **7.2 - CONDITIONS FOR SAFE STORAGE**

Store in original packaging in a dry area.  
Always use sealed and clearly labelled containers.  
Avoid damaging containers.  
Reduce dust emission during unpacking.  
Emptied containers, which may contain debris, should be cleaned before disposal or recycling.  
Recyclable cardboard and/or plastic films are recommended for packaging.

##### **7.3-SPECIFIC END USE**

The main application of these products is as thermal insulation. Use of the products is restricted to professional users. Please refer to section 8 and the relevant exposure scenario

**8 - Risk Management Measures / Exposures Controls / Personal Protection**

**OSHA allowed Exposure standards (PEL):**

Exposures shall not exceed 8 hours weighted average for mineral dusts – for more information as stated in 29 CFR 1910.1000 table Z-3. For crystalline silica the recommended respirable exposure limit is 0.05 mg/m3 based on a 10-hour weighted average.

| Substance Name     | TLV mg/m3   | PEL mg/m3 | Total dust | Respirable |
|--------------------|-------------|-----------|------------|------------|
| Crystalline Silica | 0.025 mg/m3 | 10 mg/m3  | 10 mg/m3   | 0,05 mg/m3 |
| Calcium Silicate   | -           | -         | 15 mg/m3   | 5 mg/m3    |
| Cellulose          | -           | -         | 15 mg/m3   | 5 mg/m3    |
| Others             | 10 mg/m3    | -         | 15 mg/m3   | 5 mg/m3    |

**8.1-Engineering Controls :**Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limit

**8.2-Personal Protective Equipment**

**Eyes/Face:** Safety glasses with side shields are recommended to keep dust out of eyes

**Skin:** Wear appropriate protective clothing to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators :** You should always wear a NIOSH approved dust mask. This is recommended when sanding, cutting, drilling, cleaning up, etc. Always use approved vacuum extraction

**9 - Physical and chemical properties**

|                                    |  |
|------------------------------------|--|
| <b>APPEARANCE</b>                  | White insulation material                                    |
| <b>BOILING POINT</b>               | Not applicable   |
| <b>PHYSICAL STATE</b>              | Solid  |
| <b>SPECIFIC GRAVITY</b>            | 2.9  |
| <b>OXIDISING PROPERTIES</b>        | Not applicable   |
| <b>VAPOR DENSITY</b>               | Not applicable   |
| <b>SOLUBILITY</b>                  | Nil  |
| <b>SOLUBILITY IN OTHER SOLVENT</b> | Soluble in strong acid, not soluble in alcohol and alkaline. |
| <b>ODOR</b>                        | Odorless   |
| <b>MELTING POINT</b>               | 1552°C   |
| <b>VISCOSITY</b>                   | Not applicable   |
| <b>EVAPORATION RATE</b>            | Not applicable   |
| <b>VAPOUR PRESSURE</b>             | Not applicable   |
| <b>PH</b>                          | 8.9  |
| <b>VOC</b>                         | 0, None  |
| <b>PERCENT VOLATILE</b>            | 0  |

**10 - Stability and Reactivity****10.1- Chemical Stability**

This is stable material. This product is not reactive.

**Possibility of Hazardous Reactions**

None

**10.2-Conditions to Avoid**

Please refer to handling and storage advice in Section 7

**10.3-Hazardous Decomposition**

None

**10.4-Hazardous Polymerization**

Will not occur

**11 -Toxicological information****11.1- Acute Toxicity****General Product Information:**

The primary acute health effects of this product include mechanical irritation of the skin and eyes and skin dryness as a result of contact with dust and fibers.

**Component Analysis-LD50/LC50:**

No LD50/LC50's are available for this product or its components.

**11.2 -Carcinogenicity****General Product Information:**

OSHA, NTP, IARC, AND ACGIH have not classified this product in its entirety as a carcinogen.

**Component Carcinogenicity:**

Calcium Silicate(1344-95-2) ACGIH: A4 Not classifiable as a human Carcinogen.

**12 - Ecological information**

General Product Information: No data available for this product.

Component Waste Numbers: No EPA Waste Numbers are applicable for this product's components.

**13 - Disposal Considerations****13.1 - US EPA Waste Number & Information**

**General Product Information:** This product, as supplied, is not regulated as a hazardous waste by the U.S. EPA under RCRA regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.

**Component Waste Numbers:** No EPA Waste Numbers are applicable for this product's components.

**13.2 - Disposal Instructions**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

**14- Transport information**

Not classified as dangerous goods under relevant international transport regulations (ADR, RID, IATA, IMDG).  
Ensure that dust is not windblown during transportation.

Proper shipping name: None  
Hazard class: NA  
Packing group: NA  
Identification number: Not regulated

## 15 - Regulatory information

### 15.1 - US Federal Regulations

#### General Product Information

No information on this product as a whole.

#### Component Analysis

None of this product's components are listed under SARA Section 302(40CFR 355 Appendix A), SARA Section 313(40 CFR 372.65), or CERCLA(40 CFR 302.4)

### 15.2 - State Regulations

#### General Product Information

No information available for the product.

### 15.3 - Other Regulatory Information

#### General product Information

No information available for the product.

#### TSCA status

No information available for the product.

### 15.4 - International Regulations

#### Canada Workplace Hazardous Materials Information System(WHMIS)

WHMIS Classification: D2B- Irritant

Product classified as a manufactured article as defined in Hazardous Product Act(HPA), Section 11(1). Section 12(l) exempts it from the WHMIS supplier label and MSDS requirements of ACT.

## 16 - Other Information

#### Disclaimer:

The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Safety Data Sheet. However safe as provided by law, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorisation given or implied to practice any patented invention without a licence. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product (however, this shall not act to restrict the vendor's potential liability for negligence or under statute).