

MATERIAL SAFETY DATASHEET

GOLITE 95 C&G

Date revised: 22-10-2012

1 PRODUCT / COMPANY IDENTIFICATION

Trade name Golite 95 C&G

Chemical name Alumino-silicate

Description Refractory castable

Manufacturer Gouda Refractories
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Issued by M. Franken

2 COMPOSITION / INFORMATION ON INGREDIENTS

Main components	Weight [%]	CAS Number
Portland cement	<50	65997-15-1
Aluminum silicate	<10	12141-46-7
Aluminum silicate (calcined)	<50	1327-43-1
Crystalline silica	<5	Not applicable
Cristobalite		14464-46-1
Tridymite		15468-32-3
Quartz		14808-60-7

3 HAZARD IDENTIFICATION

Nuisance dust may occur, causing irritation to skin and upper respiratory tract. Product may dry skin. Product may contain trace amounts of crystalline silica. Long term exposure to crystalline silica can cause silicosis, bronchitis and lung damage.

Health effects: - Eye Dust may be dangerous for the eyes

- Skin May dry and irritate skin

- **Inhalation** During mixing, dust will be developed and may cause irritation. Dusts of this product may be irritating to respiratory tract. Long term exposure to crystalline silica can cause silicosis, bronchitis and lung damage.

During heating of installed product above 100°C, emission of vapours will occur. Inhalation of these vapours should be avoided.

4 FIRST-AID MEASURES

- Eye** Dust should be flushed with clean water. Contact lenses should not be worn with dust in the air.
- Skin** Wash with soap and water
- Inhalation** Remove to a dust free area
- Ingestion** Not a normal way of entry. Drink large quantities of water and consult a doctor

5 FIRE-FIGHTING MEASURES

This product is non-flammable and will not support combustion

6 ACCIDENTAL RELEASE MEASURES

- Personal protection** See section 8
- Environmental protection** No special precautions
- Methods for cleaning up** Normal clean-up procedure

7 HANDLING AND STORAGE

- Handling** Prevent dust formation and ensure adequate ventilation/dust extraction
- Storage** Cool and dry

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Hazardous components	CAS Number	Exposure limits OSHA PEL [mg/m ³]	ACGIH TLV [mg/m ³]
Portland cement	65997-15-1	TWA total dust: 10 TWA respirable fraction: 5	TWA total dust: 10
Nuisance dust	---	TWA total dust: 10	TWA total dust: 10

		TWA respirable fraction: 5	TWA respirable fraction: 5
Crystalline silica			
Cristobalite	14464-46-1	0.05 respirable	Not applicable
Tridymite	15468-32-3	0.05 respirable	Not applicable
Quartz	14808-60-7	0.1 respirable	Not applicable

Calcium aluminate cement (CAS number 12042-68-1) is a low health risk by inhalation and should be treated as a nuisance dust.

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Level

STEL = Short-Term Exposure Limit

TLV = Threshold Limit Value

TWA = Time Weighted Average

Customers are advised to check national legislation for limit-values and their period of reference

Risk identification

Personal protection: - **Eye** Wear safety glasses

- **Skin** Wear standard protection work clothing

- **Hand** Wear gloves

- **Respiratory** Use respirators

- **Other** Not necessary

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Light grey granular light weight material, grains up to 5 mm, no odor

Melting point / melting range 1200 [°C]

Bulk density 500 [kg/m³]

pH Not available

Solubility in water Not available

10 STABILITY AND REACTIVITY

With water the material will harden

Conditions to avoid Moisture; may cause lumps. Cast pieces may be subjected to steam spalling if improperly cured, dried or

fired. Contact Gouda Refractories for correct dry out procedure

Materials to avoid

Water; may cause lumps

Hazardous decomposition products ---

11 TOXICOLOGICAL INFORMATION

This material provides little threat to human health within the described standards of industrial hygiene. The main danger is the possibility of inhalation of fine crystalline silica dust over a prolonged period of time. Crystalline silica is carcinogenic according to IARC (International Agency for Research on Cancer).

Toxicity	Target organs	
Aluminum oxide	Respiratory	No data
Crystalline silica		
Cristobalite	Respiratory	Repeated and prolonged inhalations may cause lung disease (silicosis)
Tridymite	Respiratory	Repeated and prolonged inhalations may cause lung disease (silicosis)
Quartz	Respiratory	Repeated and prolonged inhalations may cause lung disease (silicosis)
Alumina cement	No data	No data

12 ECOLOGICAL INFORMATION

The addition of unused cement based products to water will cause the pH to rise and may therefore be toxic to aquatic life in some circumstances.

13 DISPOSAL CONSIDERATION

Material can be recycled or disposed according to local regulations

14 TRANSPORT INFORMATION

No special precautions are required in the EEC

15 REGULATORY INFORMATION

This material does not require a hazard warning label in the EEC.

Ingredient	CAS number	List(s)
Aluminum oxide	1344-28-1	1,2,3,4
Crystalline silica		
Cristobalite	14464-46-1	1,2,3,4
Tridymite	15468-32-3	1,2,3,4

Quartz	14808-60-7	1,2,3,4
Alumina cement	12042-68-1	4

List are as follows:

1. ACGIH TLV "Treshold Limit Values" (1997)
2. OSHA Air contaminants – Permissible Exposure Limits (1989)
3. Canadian Domestic Substance list
4. EPA TSCA Chemical Inventory list

WHMIS Hazard Class (Canada): D2B

16 OTHER INFORMATION

This Material Safety Datasheet (MSDS) has been prepared in strict observance of EC directive 93/112/EEC. It is in accordance with the PRE-Recommendation 1999.

Exposure limits according to 'ACGIH TLV's and BEI's 2002' and 'NIOSH Pocket Guide to Chemical Hazards (NPG) 1997'.

This MSDS is only valid until the next revision.

The information given herein is taken from sources believed to be accurate as of the date herein. However, Gouda Refractories makes no warranty with respect to the accuracy of the information and assumes no liability to any user thereof.