SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture	SHOTKAST FS
Registration number	-
Synonyms	None.
Brand Code	9455
Issue date	08-August-2014
Version number	01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	For Industrial Use Only
Uses advised against	Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	ANH Refractories Company	
Address	400 Fairway Drive Moon Township, PA 15108, USA United States	
Division		
Telephone	General Phone: CHEMTREC 24 HOUR EMERGENCY # INTERNATIONAL #	412-375-6600 1-800-424-9300 1-703-527-3887
e-mail	REACH@anhrefractories.com	
Contact person	ANH USA	

1.4. Emergency telephone number Not available.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classificatio applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Carcinogenicity	Category 1A	H350 - May cause cancer.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Prolonged exposure may cause chronic effects. For additional information on inhalation hazards, see Section 11 of this safety data sheet.
Main symptoms	Dust may irritate the eyes and the respiratory system.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:	Cristobalite, Quartz (SiO2)

Hazard pictograms

Signal word Danger

Hazard statements

H350 May cause cancer.

Precautionary statements

Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood
P281 Use personal protective equipment as required.

Response

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations
P501 Dispose of contents/container to

Supplemental label information Not applicable.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3,2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Quartz (SiO_2)	3 - < 5	14808-60-7 238-878-4	-	-	
Classification: **DSD:** - **CLP:** Carc. 1A;H350					
Cristobalite	< 1	14464-46-1 238-455-4	-	-	
Classification: **DSD:** - **CLP:** Carc. 1A;H350					
Aluminium Oxide (Non-Fibrous)	< 0,2	1344-28-1 215-691-6	01-2119529248-35-0134	-	
Classification: **DSD:** - **CLP:** -					

Other components below reportable levels 90 - 100

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control centre immediately.
4.2. Most important symptoms and effects, both acute and delayed	Direct contact with eyes may cause temporary irritation.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	Not available.
5.1. Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not available.
5.2. Special hazards arising from the substance or mixture	Not available.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Not available.
Special fire fighting procedures	Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground. No special environmental precautions required.
6.3. Methods and material for containment and cleaning up	Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimise dust generation and accumulation. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal.
6.4. Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid contact with skin and eyes. Avoid prolonged exposure. In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Practice good housekeeping.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Keep container tightly closed. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	MAK	0,15 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	MAK	0,3 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	MAK	0,15 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	MAK	0,3 mg/m3	Respirable fraction.

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	2 mg/m3	Respirable fraction.
		0,1 mg/m3	Respirable dust.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Fumes, Silica (CAS 69012-64-2)	TWA	10 mg/m3	Inhalable fraction.
		0,07 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,07 mg/m3	Respirable fraction.
Silica, vitreous (CAS 60676-86-0)	TWA	10 mg/m3	Inhalable fraction.
		0,07 mg/m3	Respirable fraction.

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Cristobalite (CAS 14464-46-1)	MAC	0,05 mg/m3
Fumes, Silica (CAS 69012-64-2)	MAC	2,4 mg/m3
Quartz (SiO2) (CAS 14808-60-7)	MAC	0,1 mg/m3
Silica, vitreous (CAS 60676-86-0)	MAC	0,08 mg/m3

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Fumes, Silica (CAS 69012-64-2)	TWA	2 mg/m3
Silica, vitreous (CAS 60676-86-0)	TWA	2 mg/m3

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,1 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TWA	4 mg/m3	Dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	4 mg/m3	Dust.

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TLV	0,15 mg/m3	Total

Denmark. Work Environment Authority. Exposure Limits for Substances & Materials, An. 2 & 3

Components	Type	Value	Form
		0,05 mg/m3	Respirable.
Fumes, Silica (CAS 69012-64-2)	TLV	2 mg/m3	Respirable.
Quartz (SiO2) (CAS 14808-60-7)	TLV	0,3 mg/m3	Total
		0,1 mg/m3	Respirable.
Silica, vitreous (CAS 60676-86-0)	TLV	0,1 mg/m3	Respirable.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TWA	2 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	2 mg/m3	Respirable dust.

Finland. Workplace Exposure Limits

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable.
Fumes, Silica (CAS 69012-64-2)	TWA	5 mg/m3	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,05 mg/m3	Respirable.
Silica, vitreous (CAS 60676-86-0)	TWA	5 mg/m3	

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	VME	0,05 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	VME	0,1 mg/m3	Respirable fraction.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Silica, vitreous (CAS 60676-86-0)	TWA	0,3 mg/m3	Respirable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
Fumes, Silica (CAS 69012-64-2)	AGW	0,3 mg/m3	Respirable fraction.
Silica, vitreous (CAS 60676-86-0)	AGW	0,3 mg/m3	Respirable fraction.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,15 mg/m3	Respirable.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,15 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TWA	2 mg/m3	Respirable mist.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	0,1 mg/m3	Respirable dust.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,1 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TWA	6 mg/m3	Total inhalable dust.
		2,4 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	0,08 mg/m3	Respirable dust.

Italy. Occupational Exposure Limits

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,025 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Fumes, Silica (CAS 69012-64-2)	TWA	1 mg/m3
Silica, vitreous (CAS 60676-86-0)	TWA	1 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Netherlands. OELs (binding)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,075 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,075 mg/m3	Respirable dust.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TLV	0,15 mg/m3	Total dust.
		0,05 mg/m3	Respirable dust.
Fumes, Silica (CAS 69012-64-2)	TLV	1,5 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TLV	0,3 mg/m3	Total dust.
		0,1 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TLV	1,5 mg/m3	Respirable dust.

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	2 mg/m3	Total dust.
		0,3 mg/m3	Respirable dust.

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Quartz (SiO2) (CAS 14808-60-7)	TWA	2 mg/m3	Total dust.
		0,3 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	2 mg/m3	Total dust.
		1 mg/m3	Respirable dust.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,025 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,025 mg/m3	Respirable fraction.

Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances

Components	Type	Value	Form
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Cristobalite (CAS 14464-46-1)	TWA	0,1 mg/m3
Fumes, Silica (CAS 69012-64-2)	TWA	0,3 mg/m3
Silica, vitreous (CAS 60676-86-0)	TWA	0,3 mg/m3

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,15 mg/m3	Respirable fraction.
Fumes, Silica (CAS 69012-64-2)	TWA	4 mg/m3	Inhalable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable fraction.
Silica, vitreous (CAS 60676-86-0)	TWA	0,3 mg/m3	Respirable fraction.

Spain. Occupational Exposure Limits

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable fraction.

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,05 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,15 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,15 mg/m3	Respirable dust.
Silica, vitreous (CAS 60676-86-0)	TWA	0,3 mg/m3	Respirable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0,1 mg/m3	Respirable.
Fumes, Silica (CAS 69012-64-2)	TWA	6 mg/m3	Inhalable dust.
		2,4 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0,1 mg/m3	Respirable.
Silica, vitreous (CAS 60676-86-0)	TWA	0,08 mg/m3	Respirable dust.

Biological limit values

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling time
Fumes, Silica (CAS 69012-64-2)	25 %	red blood cell or total blood acetylcholinesterase activity (EC. 3.1.1.7.)	Reduction from individual baseline activity in red blood cells	*
Silica, vitreous (CAS 60676-86-0)	25 %	red blood cell or total blood acetylcholinesterase activity (EC. 3.1.1.7.)	Reduction from individual baseline activity in red blood cells	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no-effect level (DNEL) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn. Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Use tight fitting goggles if dust is generated.

Skin protection

- Hand protection Use personal protective equipment as required.

- Other Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory protection Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	None known.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
10.5. Incompatible materials	Fluorine. Chlorine. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure. Contact your sales representative for clarification.
10.6. Hazardous decomposition products	No dangerous reaction known under conditions of normal use.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects
Information on likely routes of exposure	
Ingestion	Not available.

Inhalation	Prolonged inhalation may be harmful. Inhalation of dusts may cause respiratory irritation
Skin contact	Not available.
Eye contact	Dust in the eyes will cause irritation.
Symptoms	Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity	No data available.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Do(94-final, June 2003) May cause cancer. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cristobalite (CAS 14464-46-1)	1 Carcinogenic to humans.
Quartz (SiO2) (CAS 14808-60-7)	1 Carcinogenic to humans.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible
Mixture versus substance information	No information available.
Other information	Not available.
Aquatic toxicity	Not available.
12.5. Results of PBT and vPvB assessment	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
12.5. Results of PBT and vPvB assessment	Not available.
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Not available.
Contaminated packaging	Not available.
EU waste code	Not available.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006
National regulations	Follow national regulation for work with chemical agents.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	H350 May cause cancer.
Revision information	None.
Training information	Not available.
Disclaimer	This information is based on our present knowledge on creation date. However, this shall no constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.