

# SAFETY DATA SHEET QUARTZ SAND

IN COMPLIANCE WITH REGULATION (EC) 1907/2006, REGULATION (EC) 1272/2008 AND REGULATION (EC) 453/2010

Revision:1

Issue Date: 1/11/2017

# 1. PRODUCT IDENTIFICATION

#### 1.1. Product Identifier

Quartz Sand.

REACh Registration Number: Exempted in accordance with Annex V.7 Synonyms: Quartz sand; silica sand; crystalline silica sand; silicon dioxide.

#### 1.2. Product uses

Used in civil construction and various industrial applications like: paints, ceramics, glass, glass fiber, glue, plastics, mortar, plaster, filtration, foundry sand, abrasives, filler for textured coatings, sports and leisure.

# 1.3. Details of the supplier

SIMIT Sarl

Address: Rue Omar Kaddeh - Immeuble Montplaisir Bureau 25 Tunisia - Tunisia E-mail: info@simit.tn - Internet site: www.simit.tn

### 1.4. Emergency telephone number

Emergency telephone number: +216 70 697 400 Number available outside work hours: No

# 2. COMPOSITION

Main component: QUARZT SiO2 Quantity: > 93% N° EINECS: 238-878-4

N° CAS: 14808-60-7

Impurity:

This product contains less than 1% of respirable quartz and therefore it is not classified



# 3. HAZARDS IDENTIFICATION

SiO2 (quartz) – Airborne dust at high concentration is irritant for the eyes and respiratory airways. Crystalline silica sand can cause abrasion to the cornea.

Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis.

Principal symptoms of silicosis are cough and breathlessness. Occupational exposure to respirable crystalline silica dust should be monitored and controlled.

#### Classification of the substance

This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/EEC.

# Hazard indications specific for human and environment

None

In normal utilization conditions the product does not present particular hazards for the environment. See Paragraph 16 on Social Dialogue on Respirable Crystalline Silica and Good Practices Guide

# Label elements

Symbols: None

Hazard indication: None

Precautionary indications: None

Special indications: None

Content: Non hazardous substance

# Special indications based on Annex XVII of REACH and successive amendments:

None

# Other hazards resulting from evaluation PBT e vPvB

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACh

# 4. FIRST AID MEASURES

#### 4.1. Description of First Aid measures:

Inhalation It is recommended to move the exposed person from the area

to a fresh air location

Skin contact No special first aid measures necessary.

Eye contact Rinse with water extensively and seek medical attention if

irritation persists.

Ingestion No first aid measures necessary.

Actions to avoid None First aid personnel protection requirements None

# 4.2. Most important symptoms and effects both acute and delayed

No acute and delayed symptoms and effects are observed.

# 4.3. Indication of any immediate medical attention and special treatment needed

No specific actions are required.



# 5. FIRE-FIGHTING MEAUSURES

No specific extinguishing media is needed. The product is non-combustible.

# 6. ACCIDENTAL RELEASE MEASURES

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

Avoid airborne dust generation, wear personal protective equipment in compliance with national legislation.

# 6.2. Environmental precautions:

No special requirement.

#### 6.3. Methods and material for containment and cleaning up:

Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Wear personal protective equipment in compliance with national legislation.

#### 6.4. Reference to other sections:

Refer to sections 7, 8 e 16.

# 7. HANDLING AND STORAGE

# 7.1. Precautions for safe handling

Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting.

If you require advice on safe handling techniques, please contact your supplier or check the Good Practice Guide referred to in section 16.

Do not to eat, drink and smoke in work areas, wash hands after use, remove contaminated clothing and protective equipment before entering eating areas.

# 7.2. Conditions for safe storage, including any incompatibilities

Minimize airborne dust generation and prevent wind dispersal during loading and unloading. Keep containers closed and store packaged products so as to prevent accidental bursting.

# 7.3. Specific end uses

If you require advice on specific uses, please contact your supplier or check the Good Practice Guide referred to in section 16.

# 8. EXPOSURE CONTROL / PERSONAL PROTECTION

# 8.1. Control parameters

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).

The OEL (Occupational Exposure Limit) for respirable crystalline silica dust is 0.1 mg/m³ in Belgium, measured as an 8 hour TWA (Time Weighted Average). For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.



# 8.2. Exposure controls

# 8.2.1. Technical controls

Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

# 8.2.2. Individual protection measures, such as personal protection equipment

a) Eye / face protection

Wear safety glasses with side-shields when there is a risk of penetrative eye injuries.

b) Skin protection

No specific requirement. For hands, see below. Appropriate protection (e.g. protective clothing, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

c) Hands protection

Appropriate protection (i.e. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.

d) Respiratory protection

In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

# 8.2.3. Environmental exposure controls

Avoid dispersal by wind.

# 9. PHYSICAL - CHEMICAL PROPERTIES

Physical state Solid

Forma Granular crystalline

Odour Odourless
Ph 5 - 8
Colour white / yell

Colour white / yellow
Melting point 1600°C ca.
Boiling point 2230°C ca.
Decomposition temperature Not applicable

Flash point

Solubility

Not applicable

Not soluble in water. Soluble in hydrofluoric acid

Apparent. 1,3 - 1,5 g/cm3. Absolute.2,6 - 2,7 g/cm3.

Oxydant properties Not applicable

# 10. STABILITY AND REACTIVITY

11.1. Reactivity

Inert, not reactive

11.2. Chemical stability

Chemically stable

11.3. Possibility of hazardous reactions

No hazardous reaction possible

11.4. Conditions to avoid

Not relevant

11.5. Material incompatibility

None in particular

11.6. Hazardous decomposition products

Not relevant



# 11. TOXICOLOGICAL INFORMATION

Acute toxicity None

Chronic toxicity Prolonged exposure to high concentration of quartz dust

can cause irreversible damages to the lungs.

# 12. ECOLOGICAL INFORMATION

Degradability/persistece Not relevant

Mobility in soil None

Bioaccumulative potential / toxicity Not relevant

Results of PBT and vPvB assessment Not relevant

Other adverse effects No specific adverse effects known

# 13. DISPOSAL CONSIDERATIONS

# 13.1. Waste treatment methods

# Waste from residues/unused products

Where possible, recycling is preferable to disposal. Can be disposed of in compliance with local regulations.

# **Packaging**

Dust formation from residues in packaging should be avoided and suitable worker protection assured.

Store used packaging in enclosed receptacles. Recycling and disposal of packaging should be carried out in compliance with local regulations.

# 14. TRANSPORT INFORMATION

Material not hazardous for transportation according to the transport hazard classes (ADR, RID, ADNR, IMDG/GGV ICAO/IATA). It is nevertheless recommended to verify and respect specific national or regional regulations on the subject of dangerous activities and environmental protection.



# 15. REGULATORY INFORMATION

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

International legislation / requirements:

# Regulation 1907/2006 (REACh):

Exempted, according to art. 2, paragraph 7.

## **European Directive on Dangerous Substances 67/548:**

This product is not classified as dangerous.

# **European Community Labelling:**

No labelling required.

#### SARA 311/312:

Hazard Categories for SARA Section 311/312 Reporting: Chronic Health

#### **SARA 313:**

This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirement Under the SARA Section 313 (40 CFR 372): None

#### CERCLA Section 103 Reportable Quantity: None

#### California Proposition 65:

This product contains substances regulated under California Proposition 65.

#### **Toxic Substances Control Act:**

All of the components of this product are listed on the EPA TSCA Inventory or exempt from premanufacture notification requirements.

#### **European Inventory of Commercial Chemical Substances:**

All of the components of this product are listed on the EINECS Inventory or exempt from notification requirements.

#### **Canadian Environmental Protection Act:**

All the components of this product are listed on the Canadian Domestic Substances List or exempt from notification requirements.

#### **Canadian WHMIS Classification:**

Not a controlled product. This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

#### Japan METI:

All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

# **Australian Inventory of Chemical Substances:**

All of the components of this product are listed on the AICS inventory or exempt from notification requirements

#### Korea

All of the components of this product are listed on the ECL inventory or exempt from notification requirements.

# Philippines:

All of the components of this product are listed on the PICCS inventory or exempt from notification requirements.

# 15.2. Chemical safety assessment

Exempted from REACH Registration in accordance with Annex V.7.



# 16. OTHER INFORMATION

#### Third party materials

Insofar as materials not manufactured or supplied by SIMIT sarl. are used in conjunction with, or instead of SIMIT sarl. materials, it is the responsibility of the customer himself to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of SIMIT sarl. quartz sand in conjunction with materials from another supplier.

#### Liabilities

Such information is to the best of SIMIT sarl. knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

#### **Training**

Workers must be trained in the proper use and handling of this product as required under applicable regulations.

#### Social Dialogue on Respirable Crystalline Silica and Good Practices Guide

A multi-sectoral social dialogue agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it was signed on 25 April 2006. This autonomous agreement, which receives the European Commission's financial support, is based on a Good Practices Guide. The requirements of the Agreement came into force on 25 October 2006. The Agreement was published in the Official Journal of the European Union (2006/C 279/02). The text of the Agreement and its annexes, including the Good Practices Guide, are available from <a href="http://www.nepsi.eu">http://www.nepsi.eu</a> and provide useful information and guidance for the handling of products containing respirable crystalline silica. Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

#### Literature Reference

Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica.

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 it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (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 Doc 94-final, June 2003).

So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.

# Health & Safety Executive (specific for UK):

Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive, UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as "silicosis". In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis.

