in compliance with regulation (EC) 1907/2006, (EC) 1272/2008 and (EC) 830/2015 silica sand and gravel quartz sand and gravel



SECTION 1 - PRODUCT IDENTIFICATION AND COMPANY IDENTIFICATION

Identification of the substance/mixture

Product name/Trade name

Silica or quartz sand from Quedlinburg (QQs), filter sand from Quedlinburg (QFs)

silica sand, quartz sand, industrial sand, sand, brake sand, track sand, filter sand, filter quarz, moulding and core sand, glass sand, playground sand, bird sand, ornamental gravel, aggregate for fireproof mortal, beachvolleyball sand, sand and gravel for fall protection, sand for golf course, artificial turf sand, horse riding court sand

Company / Producer

WOLFF & MÜLLER Quarzsande GmbH

Drying plant 2

Feldmark links der Bode 18

06484 Quedlinburg

Phone: +49 3946 52734-29 Fax: +49 3946 52734-19

E-mail: anfragen@wm-quarzsande.de

Web: www.wm-quarzsande.de

Drying plant 1 Großorden 25 06484 Quedlinburg

Phone: +49 3946 702-801 Fax.: +49 3946 526-610

Emergency phone

Office hours: Monday to Friday 7am - 5pm, Phone: + 49 3533-604-0

Mr. Thomas Müller

Phone: + 49 3533-60472, Mobil: +49 172-7428852

E-Mail: thomas.mueller@wolff-mueller.de

SECTION 2 - HAZARDS IDENTIFICATION

This product does not meet the criteria for classification as a dangerous or hazardous material as defined in the regulation EC 1272/2008.

This product is an inorganic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH. It is not flammable, combustible and explosive.

The health hazards are mainly related to dust generated containing silica sand during handling. This product should be handled with care to avoid dust formation.

Depending on handling and use (e.g. grinding, drying), the formation of airborne alveolar crystalline silica is possible. Long-term and/or intensive inhalation of alveolar crystalline silica can cause dust lung disease (silicosis). The main symptoms of silicosis are cough and breathing problems/breathlessness. In case of irregular exposure to alveolar crystalline silica, appropriate protective and monitoring measures should be in place.

Special care should be taken when handling the product to avoid dust formation.



SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical characterization - natural substance

Main constituent

quartz amount: $SiO_2 > 99\%$ EINECS number: 238-878-4 CAS number: 14808-60-7

Natural product, quartz, humidity less than <1%

Impurities

This product contains less than 1 % of alveolar quartz classified as STOT RE 1.

Chemical properties

 SiO_2 > 99 Ma. % AI_2O_3 < 0,1 Ma. % Fe_2O_3 \leq 0,1 Ma. % CaO < 0,02 Ma. % K_2O < 0,02 Ma. % Na_2O < 0,02 Ma. %

Loss on ignition: 0,2 Ma. %

<u>Mixtures</u> – not applicable

SECTION 4 - FIRST AID PROCEDURE

First-aid measures general

If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation

If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact

Rinse immediately with plenty of water. Gently wash with plenty of soap and water.

First-aid measures after eye contact

Immediately rinse with water for a prolonged period while holding the eyelids wide open. Seek medical attention if material is embedded in eye. If eye irritation persists: Get medical advice and attention. <u>First-aid measures after ingestion</u>

If swallowed, do not induce vomiting: seek medical advice immediately and show container or label.



SECTION 5 - FIRE FIGHTING MEASURES Extinguishing media No specific extinguishing media is needed. Special hazards arising from the substance or mixture Non-flammable. No dangerous thermal decomposition. Advice for firefighters No specific fire protection measures required. SECTION 6 - ACCIDENTAL RELEASE MEASURES Personal precautions, protective equipment and emergency procedures Avoid dust formation, wear personal protective equipment in compliance with national legislation. **Environmental precautions** No specific precautions. Methods and material for containment and cleaning up Avoid dry sweeping and use water spraying / flushing or ventilated vacuum cleaning system. Wear protective clothing that complies with national regulations. SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling

Avoid dust formation. Do not breath dust. Use adequate exhaust ventilation and dust collection. Keep airborne dust concentrations below permissible national exposure limits. In case of insufficient ventilation, wear suitable respiratory protective equipment when using, handling, storing or disposing of this product or bag.

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

Conditions for safe storage taking into account incompatibilities

Technical measures/safety precautions

Minimise dust formation and avoid drifts during loading operations. Keep containers closed and store packaged products in such a way that packaging is not damaged.

Specific end uses

For information on specific end uses, please contact the supplier of the product.

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SECTION 8 - EXPOSURE CONTROLS / PERONSAL PROTECTION

Control parameters

In Germany: Legal exposure limits according to TRGS 900 are:

1.25 mg/m³ respirable crystalline silica dust (A-dust)

10 mg/m³ respirable dust (E-dust)

Information on the limit values of other countries can be obtained from expert experts for occupational hygiene or the relevant regulatory authority of the respective country.

Exposure controls

Minimize dust formation. 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 organizational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

Individual protection measures, such as personal protective equipment

<u>Eye/face protection:</u> Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.

<u>Skin protection:</u> 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.

<u>Hand protection:</u> Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.

<u>Respiratory protection:</u> In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

Environmental exposure controls

Avoid wind blows.



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: solid, yellow, grey-white, white or multicoloured

Grain shape: angular

Odour: odourless

pH: ~ 7

Sintering temperature: > 1600 °C

Flash pont: Not applicable Velocity of vaporization: Not applicable

Flammability: Not applicable

upper/lower limit of inflammation/explosion: Not applicable

Vapour pressure: Not applicable

Vapour density: Not applicable

Solubilities: - in water: insoluble

- in hydrofluoric acid: yes

SECTION 10 - STABILITY AND REACTIVITY

Reactivity

Unresponsive. Hazardous reactions will not occur under normal conditions.

Chemical stability

Stable under normal temperature and pressure.

Conditions to avoid

None known

Hazardous decomposition products

Not relevant

Incompatible materials

No particular incompatibility



SECTION 11 - TOXICOLOGICAL INFORMATION

<u>Information on toxicological effects</u>

Acute toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Long-term and/or intensive inhalation of alveolar crystalline silica can cause dust lung disease (silicosis).

Aspiration hazard:

Based on available data, the classification criteria are not met.

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SECTION 12 - ECOLOGICAL INFORMATION

Toxicity

Not relevant

Persistence and degradability

Not relevant

Bioaccumulative potential

Not relevant

Mobility in soil

Negligible

Results of PBT and vPvB assessment

Not relevant

Water hazard class

generally not hazardous to water

Other adverse effects

No additional information available



SECTION 13 - DISPOSAL INFORMATION

Waste from residues/ unused products

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. The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorized waste management company.

SECTION 14 - TRANSPORT INFORMATION

UN-Number

Not relevant

UN proper shipping name

Not relevant

Transport hazard classes

ADR: Not classified IMDG: Not classified ICAO/IATA: Not classified RID: Not classified

Packing Group

Not relevant

Environmental hazards

Not relevant

Special precautions for user

No special precautions

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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Not relevant



SECTION 15 - REGULATORY INFORMATION

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

Chemical safety assessment

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: Labelling not required

European Inventory of Commercial Chemical Substances: All of the components of this product are listed on the EINECS; Inventory or exempt from notification requirements.

Germany

TRGS 900 and TRGS 906 - must be observed in their current version.

Chemical safety assessment

Exempted from REACH Registration in accordance with Annex V.7

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SECTION 16 - OTHER INFORMATION

Indication of the changes made to the previous version of the SDS

The limit value for occupational exposure to alveolar dust (A) dust fraction was reduced from 3.0 to 1.25 mg / m3 according to the TRGS 900 version of 7.6.2018. Revision in accordance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EU) 2015/830.

Introduction Water hazard class

TRGS 9000 from 25.02.2022

Abbreviations and Acronyms

ADR/RID European Agreements on the transport of dangerous goods by road/ railway

CAS Chemical Abstracts Service

EG/EINECS European Inventory of Existing Commercial chemical substances

IATA International Air Transport Association

IBC-Code International standard for the safe carriage by sea of dangerous and noxious liquid

chemicals in bulk

ICAO-TI Technical regulations on the transport of dangerous goods by air

IMGD International Maritime Code for Dangerous Goods

MARPOL Marine Pollution (International Convention for the Prevention of Marine Pollution from

Ships)



PBT Persistent, bio-accumulative and toxic

REACH Registration, Evaluation and Authorization of Chemicals ((EG) 1907/2006)

STOT Specific target organ toxicity

TRGS Technical guideline for the handling of hazardous materials

vPvB Very persistent, very bioaccumulative

Training

Workers must be informed about the silica content of the product and trained in the proper handling of the product. WMQ products contain less than 1% respirable quartz classified as STOT RE 1.

For that reason, Directive (EU) 2017/2398 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 December 2017 amending Directive 2004/37 / EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work is only used as a precautionary information. The limit value refers to "quartz dust produced during a working process" - see point 18 of the explanatory memorandum to Directive 2017/2398. As part of Directive 2004/37 / EC, this limit is a binding limit. The amendment to the Carcinogens and Mutagenic Substances Directive (CMD) entered into force on 16 January 2018. Member States have until 17 January 2020 to transpose the Directive into national law. Measures to reduce dust formation can be found in the Safety Data Sheet (Sections 7, 8.2 and 16) and the "Good Practices Guide on Good Health Practices and Use of Crystalline Silica and Products Containing It". This guide is available in all European languages at: https://www.nepsi.eu

Liability

The above information is believed to be accurate based on the most current data available and current as of the date of this Safety Data Sheet and is offered in good faith.

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