

SPHEROID QUARTZ

Safety data sheet

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

1.1. Product identifier

Code: **SPHEROID QUARTZ 0,1-0,5/0,7-1,2mm**
 Product name: --

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

Intended use: ceramics, glass fibre, special concrete, building material

1.3 Details of the supplier of the safety data sheet

Company name: **IDEAL WORK SRL**
 Address: **Via Kennedy, 52**
 Place and country: **31030 Vallà di Riese Pio X (TV)**
Italy
 tel. **0423 /4535**
 fax **0423 /748429**

e-mail address for a competent person responsible for the safety data sheet

sicurezza@idealwork.it

1.4 Emergency telephone number

For information in an emergency

Poison center:
National Poisons Information Service (Birmingham Unit) City Hospital
Dudley Rd Birmingham
Telephone: +44 121 507 4123
Fax: +44 121 507 55 88
Emergency telephone: 844 892 0111

SECTION 2. Hazards identification.

2.1 Classification of the substance or mixture

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

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

This product should be handled with care to avoid dust generation.

Regulation (EC) 1272/2008:

No classification

This product contains less than 1% fine fraction of crystalline silica.

2.2 Label elements

none

2.3 Other hazards

This product is not an organic substance and does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

SECTION 3. Composition/information on ingredients.

Composition

| Name | Amount WT.-% | CAS-No. | EC-No. | Classification according (EC)1272/2008 | REACH-Registy-No |
|--------|--------------|------------|-----------|--|---------------------------------------|
| Quartz | 98 | 14808-60-7 | 238-878-4 | no classification | Exempted in accordance with Annex V.7 |

Impurities

This product contains less than 1% fine fraction of crystalline silica.

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SECTION 4. First aid measures.

4.1 Description of first aid measures

| | |
|--------------|---|
| Eye contact | Rinse with copious quantities of water and seek medical attention if irritation persists. |
| Inhalation | Movement of the exposed person from the area to fresh air is recommended. |
| Ingestion | No first-aid measure required. |
| Skin contact | No special first aid measures necessary. |

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.

SECTION 5. Firefighting measures.

5.1 Extinguishing media

No specific extinguishing media is needed.

5.2 Special hazards arising from the substance or mixture

Non combustible. No hazardous thermal decomposition

5.3 Advice for firefighters

No specific fire-fighting protection is required

SECTION 6. Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures

Avoid airborne dust generation. In case of exposure to prolonged or high level of airborne dust, wear a personal respirator in compliance with EN 149 and the national legislation. Wear personal protective equipment in compliance with national legislation.

6.2 Environmental precautions

No special requirements.

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

See sections 8 and 13.

SECTION 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 eat, drink, smoke in work areas; wash hands before entering areas, where food is consumed, take of contaminated clothes and protective equipment

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Safety precautions: Minimise 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 use(s)

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

SECTION 8. Exposure controls/personal protection.

8.1 Control

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, **parameters** breathable dust, breathable crystalline silica dust). The OEL (Occupational Exposure Limit) for breathable crystalline silica dust find attached for all countries of the EU. For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.

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8.2 Exposure controls

8.2.1 Appropriate

Minimize airborne dust generation. Use process enclosures, local exhaust ventilation or **engineering controls** 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.

8.2.2. Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries, e.g. glasses acc. to EN 166). Contact lenses should not be worn when working with this product.

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.

Hand protection

Appropriate protection (e.g. gloves acc. to EN 374, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin. Wash hands at the end of each work session.

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 (e.g. acc. to EN 149).

8.2.3 Environmental exposure controls

Avoid wind dispersal.

SECTION 9. Physical and chemical properties.

9.1 Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Appearance | Solid |
| Color | |
| Odour | odourless |
| Odour treshold | not relevant |
| pH-value | approx.. 6-8 |
| Melting point/freezing point/ | not available |
| Boiling point | |
| Flashpoint | |
| Rate of vaporization | |
| Inflammability (solid, gas) | |
| Upper/lower inflammability- or explosion limits | |
| Vapour pressure | |
| Vapour density | |
| Specific gravity | 2 -- 3 g/cm ³ |
| Solubility in water in hydrofluoric acid | negligible |

9.2 Other information

no other information

SECTION 10. Stability and reactivity.

10.1 Reactivity

Inert, not reactive

10.2 Chemical stability

Chemically stable in diluted acid or base, soluble in hydrofluoric acid HF.

10.3 Possibility of hazardous reactions

No hazardous reactions.

10.4 Conditions to avoid

Not relevant.

10.5 Incompatible materials

No particular incompatibility.

10.6 Hazardous decomposition products

No hazardous decomposition products in regular use of product.

SECTION 11. Toxicological information.

11.1 Information on toxicological effects

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 sensitisation

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

This product contains less than 1% fine fraction of crystalline quartz.

Prolonged and/or massive exposure to breathable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine breathable 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 breathable 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 (see section 16 below).

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

SECTION 12. Ecological information.

12.1 Toxicity

not relevant

12.2 Persistence and degradability

not relevant

12.3 Bioaccumulative potential

not relevant

12.4 Mobility in soil

negligible

12.5 Results of PBT und vPvB assessment

not relevant

12.6 Other adverse effects

No specific adverse effects known.

SECTION 13. Disposal considerations.

13.1 Waste treatment methods

Waste from residues /

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

Packaging

Dust formation from residues in packaging should be avoided and suitable worker protection assured. Store used packaging in enclosed receptacles. The re-use of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorized waste management company.

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SECTION 14. Transport information.

| | |
|---|---|
| 14.1 UN-Number | not relevant |
| 14.2 UN proper shipping name | Nicht relevant |
| 14.3 Transport hazard class | ADR: not classified IMDG: not classified ICAO/IATA: not classified RID: not classified |
| 14.4 Packaging group | not relevant |
| 14.5 Environmental hazards | not relevant |
| 14.6 Special precautions for user | no special precautions |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | not relevant |

SECTION 15. Regulatory information.

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

TRGS 559

Water hazard classification

not classified

International regulations:

Exempted in accordance with Annex V.7

15.2 chemical safety assessment

The OEL (Occupational Exposure Limit) for breathable crystalline silica dust find attached for all countries of the EU. Exempted from REACH Registration in accordance with Annex V.7 of REACH- Regulation (EG) 1272/2008

SECTION 16. Other information.

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

Changes due to formal requirements of Regulation [EC]1272/2008 and [EC] 453/2010

Hazard codes of components in Article 3

Training

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

Social dialogue on respirable crystalline silica

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 <http://www.nepsi.eu> 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.

Third party material

Insofar as materials not manufactured or supplied by Gebr. Dorfner are used in conjunction with, or instead of Gebr. Dorfner 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 or other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of Gebr. Dorfner's Kaolin FP 80 ground in conjunction with materials from another supplier.

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Liability

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. No liability can be accepted in respect of the use of our product(s) in conjunction with materials from another supplier.

Attachment

Occupational Exposure Limits in mg/m₃ 8 hours TWA – breathable dust – in EU 27₁ + Norway & Switzerland

| Country authority (see next page) | Non specified inert (dust) | Quartz | Cristobalite | Tridymite | Diatomaceous earth | Amorphous Silica | Fused Silica | Kaolin | Mica | Talc |
|-----------------------------------|----------------------------|------------|--------------|-----------|--------------------|------------------|--------------|--------|------|------|
| Austria/I | 6 | 0,15 | 0,15 | 0,15 | | | 0,3 | | | 5 |
| Belgium/II | 3 | 0,1 | 0,05 | 0,05 | 3 | 2 | 0,1 | 2 | 3 | 2 |
| Bulgaria/III | 4 | 0,07 | 0,07 | 0,07 | 1 | | | | | 3 |
| Czech Republic/IV | | 0,1 | 0,1 | 0,1 | | | | | 2 | 2 |
| Cyprus/V | / | 10k/Q2 | / | / | / | 2 | / | / | / | / |
| Denmark/VI | 5 | 0,1 | 0,05 | 0,05 | 1,5 | | 0,1 | 2 | | |
| Estonia | | 0,1 | 0,05 | 0,05 | | 2 | | | | |
| Finland/VII | / | 0,2 | 0,1 | 0,1 | 5 | | | | | 5 |
| France/VIII | | 5 or 25k/Q | | | | | | | | |
| France/IX | 5 | 0,1 | 0,05 | 0,05 | | | | 10 | | |
| Germany/X | 3 | β | / | / | | | 0,3 | | | 2 |
| Greece/XI | 5 | 0,1 | 0,05 | 0,05 | | | | | | 2 |
| Hungary | | 0,15 | 0,1 | 0,15 | | | | | | 2 |
| Ireland/XII | 4 | 0,05 | 0,05 | 0,05 | | 2,4 | 0,08 | 2 | 0,8 | 0,8 |
| Italy/XIII | 3 | 0,025 | 0,025 | 0,025 | | | 0,1 | 2 | 3 | 2 |
| Lithuania/XIV | 10 | 0,1 | 0,05 | 0,05 | | | | | | 1 |
| Luxembourg/XV | 6 | 0,15 | 0,15 | 0,15 | | | 0,3 | | | 2 |
| Malta4/XVI | | / | / | / | / | | | | | |
| Netherlands/XVII | 5 | 0,075 | 0,075 | 0,075 | | | | 10 | 2,5 | 0,25 |
| Norway/XVIII | 5 | 0,1 | 0,05 | 0,05 | 1,5 | 1,5 | | | 3 | 2 |
| Poland | | 0,3 | 0,3 | 0,3 | 2 | | 1 | | | 1 |
| Portugal/XIX | 5 | 0,025 | 0,025 | 0,025 | | | 0,1 | 2 | 3 | 2 |
| Romania/XX | 10 | 0,1 | 0,05 | 0,05 | | | | 2 | 3 | 2 |
| Slovakia | | 0,1 | 0,1 | 0,1 | | 2 | | | 2 | 2 |
| Slovenia | | 0,15 | 0,15 | 0,15 | | | 0,3 | | | 2 |
| Spain/XXI | 3 | 0,1 | 0,05 | 0,05 | | | 0,1 | 2 | 3 | 2 |
| Sweden/XXII | 5 | 0,1 | 0,05 | 0,05 | | | | | | 1 |
| Switzerland/XXIII | 6 | 0,15 | 0,15 | 0,15 | | 0,3 | 0,3 | 3 | 3 | 2 |
| UK/XXIV | 4 | 0,1 | 0,1 | 0,1 | 1,2 | 2,4 | 0,08 | 2 | 0,8 | 1 |

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¹ Missing information for Latvia – To be completed.

² Q : quartz percentage – K=1

³ Germany has no more OEL for quartz, cristobalite and tridymite. Employers are obliged to minimize exposure as much as possible, and to follow certain protective measures.

⁴ When needed, Maltese authorities refer to values from the UK for OELVs which do not exist in the Maltese legislation.

Country Adopted by/Law denomination OEL Name (if specific)

| | |
|--------------------------|---|
| Austria I | Bundesministerium für Arbeit und Soziales Maximale ArbeitsplatzKonzentration (MAK) |
| Belgium II | Ministère de l'Emploi et du Travail |
| Bulgaria III | Ministry of Labour and Social Policy and Ministry of Health. Ordinance n°13 of 30/12/2003 Limit Values |
| Cyprus IV | Department of Labour Inspection. Control of factory atmosphere and dangerous substances in factories, Regulations of 1981. |
| Czech Republic V | Governmental Directive n°441/2004 |
| Denmark VI | Direktoratet for Arbejdstilsynet Threshold Limit Value (TLV) |
| Finland VII | National Board of Labour Protection Occupational Exposure Standard |
| France VIII | Ministère de l'Industrie (RGIE) Empoussiérage de référence |
| IX | Ministère du Travail Valeur limite de Moyenne d'Exposition |
| Germany X | Bundesministerium für Arbeit Maximale ArbeitsplatzKonzentration (MAK) |
| Greece XI | Legislation for mining activities |
| Ireland XII | 2002 Code of Practice for the Safety, Health & Welfare at Work (CoP) |
| Italy XIII | Associazione Italiana Degli Igienisti Industriali Threshold Limit Values (based on ACGIH TLVs) |
| Lithuania XIV | Dėl Lietuvos higienos normos HN 23:2001 Ilgalaikio poveikio ribinė vertė (IPRV) |
| Luxembourg XV | Bundesministerium für Arbeit; Maximale Arbeitsplatz Konzentration (MAK) |
| Malta XVI | OHSa – LN120 of 2003, www.ohsa.org.mt OELVs |
| Netherlands XVII | Ministerie van Sociale Zaken en Werkgelegenheid Publieke grenswaarden http://www.ser.nl/en/oeel_database.aspx |
| Norway XVIII | Direktoratet for Arbejdstilsynet Administrative Normer (8hTWA) for Forurensing I Arbeidsmiljøet |
| Portugal XIX | Instituto Portuges da Qualidade, Hygiene & Safety at Workplace NP1796:2007 Valores Limite de Exposição (VLE) |
| Romania XX | Government Decision n° 355/2007 regarding workers' health surveillance. Government Decision n° 1093/2006 regarding carcinogenic agents (in Annex 3: Quartz, Cristobalite, Tridymite). OEL |
| Spain XXI | Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007 Valores Limites |
| Sweden XXII | National Board of Occupational Safety and Health Yrkeshygieniska Gränsvärden |
| Switzerland XXIII | Valeur limite de Moyenne d'Exposition United |
| Kingdom | |
| XXIV | Health & Safety Executive Workplace Exposure Limits (WEL) |

Source : IMA-Europe. Date : May 2010, updated version available at <http://www.ima-europe.eu/otherPublications.html>