SAFETY DATA SHEET- M300 SILICA SAND

According to regulation (EC) No 2020/878

Valentine Clays
MANUFACTURED IN THE HEART OF THE POTTERIES

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

1.1 Product Identifier

M300 SILICA SAND

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

Use of the substance/mixture

Primarily used as a clay body addition to maintain and control body fired strength, this product has a slightly higher iron content.

1.3 Details of the supplier of the safety data sheet

Valentine Clays LTD

Valentine Way

Stoke on Trent

ST4 2FJ

t: +44 (0)1782 271200

e: sales@valentineclays.co.uk

w: www.valentineclays.co.uk

1.4 Emergency Telephone Number

+44 (0)1782 271200

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

This product contains respirable particles as an impurity and therefore is classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008 and does not meet the criteria for classification as harmful according to Directive 67/548/EEC.

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.

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

Regulation EC 1272/2008

WARNING STOT RE2

H373- May cause damage to lung through prolonged or repeated exposure by inhalation.

Classification EU (67/548/EEC)- No Classification'

This product contains respirable crystalline silica between 1 and 10%.

2.2 Label Elements

WARNING STOT RE2

Hazard Statements:

H373 - May cause damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary Statements:

P260 - Do not breathe dust.

P285 - In case of inadequate ventilation wear respiratory protection.

P501 - Dispose of contents/containers in accordance with local regulations.

2.3 Other Hazards

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

Section 3: Composition/information on ingredients

3.1 Main Constituent

Component	CAS	EINECS	% Composition
Quartz	14808-60-7	238-878-4	>98%

3.2 Impurities

This product contains between 1 and 10% respirable quartz and is classified as STOT RE2.

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation- Movement of the exposed individual from the area to fresh air is recommended.

After Ingestion- No first-aid measures required.

After Eye Contact- Rinse with copious quantities of water and seek medical attention if irritation persists.

After 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 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, 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 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

Technical measures/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 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 quartz dust is 0.1 mg/m^3 in Belgium, measured as an 8hour 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

Appropriate Engineering 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.

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.

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, 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.

Environmental Exposure Controls

Avoid wind dispersal.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance- Solid, White Powder

Grain Shape- Angular

Odour- Odourless

Odour Threshold- Not Relevant

pH (400 g/l water at 20°c) - 5-8

Melting Point- >1610°c

Relative Density- 2-3 g/cm³

Solubility in Water- Negligible

Solubility in Hydrofluoric Acid- Yes

9.2 Other Information

No other information.

Section 10: Stability and Reactivity

10.1 Reactivity

Inert, not reactive

10.2 Chemical Stability

Chemically stable

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

Not relevant

Section 11: Toxicological Properties

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 respirable quartz as an impurity and therefore is classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008.

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 (see section 16 below).

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.

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 Bio accumulative potential

Not relevant

12.4 Mobility in soil

Negligible

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No specific adverse effects known.

Section 13: Waste Disposal

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

Section 14: Transport Information

14.1 UN number

Not relevant

14.2 UN proper shipping name

Not relevant

14.3 Transport hazard class(es)

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

Classification for Supply

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 STOT RE2 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 Requirements 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.

Section 16: Other Information

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

In compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 453/2010.

This data sheet is provided under CLP and REACH Regulation and is not intended to constitute an assessment of workplace risk associated with product(s) used as required under any other Health and Safety Regulation.

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.

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