

SAFETY DATA SHEET- MOLOCHITE

According to regulation (EC) No 2020/878

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

1.1 Product Identifier

Molochite (-200's, -120's, - 80's, 50/80's, 30/80's, -30's)

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

Use of the substance/mixture

Primarily used to reduce shrinkage of engobes and to increase resistance to thermal shock.

1.3 Details of the supplier of the safety data sheet

Valentine Clays LTD

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ST4 2FJ

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1.4 Emergency Telephone Number

+44 (0)1782 271200

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 Regulation (EC) 1272/2008 and in Directive 67/548/EEC.

This product contains less than 1 % of respirable quartz.

Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica (quartz) 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: No classification.

Classification EU (67/548/EEC): No classification.

2.2 Label Elements

None

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 Substance

Component	CAS	EINECS	% Composition
Kaolin, calcined	92704-41-1	296-473-8	100 %

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Calcined kaolin is a UVCB substance (Unknown or Variable composition, Complex reaction products or Biological materials).

3.2 Main Constituents

Component	CAS	EINECS
Mullite	1302-93-8	215-113-2
Amorphous phase	-	-

3.3 Constituent contributing to classification

This product contains less than 1 % of respirable quartz.

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 measure required.

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

After Skin Contact- No first aid measure 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 firefighting 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.

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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). For the occupational exposure limits in your country, 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, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

Other than suitable protective clothing, no special controls are needed in the case of slop or plastic materials other than cleaning any spillages before they dry out. Goggles may be used to prevent possible eye irritation and gloves if skin irritation is likely. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.

8.3 Environmental Exposure Controls

Avoid wind dispersal.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance- Solid (grains, powder)

Odour- Odourless

Odour threshold- Not relevant

pH (100 g/l in water at 20 °C)- 8

Melting point / freezing point- Not available

Initial boiling point and boiling range- Not relevant

Flash point- Not relevant

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Evaporation rate- Not relevant

Flammability (solid, gas)- Non-flammable

Upper/lower flammability or explosive limits- Not relevant

Vapour pressure- Not relevant

Vapour density- Not relevant

Relative density- 2.7 g/cm³

Solubility(ies) Solubility in water- negligible (< 10-2 g/l)

Solubility in hydrofluoric acid- yes

Partition coefficient n-octanol / water- Not relevant

Auto-ignition temperature- Not relevant

Decomposition temperature- Not relevant

Viscosity- Not relevant

Explosive properties- Not relevant

Oxidising properties- Not relevant

9.2 Other Information

No other information available.

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.

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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- Based on available data; the classification criteria are not met.

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)

ADR- Not classified.

IMDG- Not classified.

ICAO / IATA- Not classified.

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RID- Not classified.

14.4. Packing 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

Not relevant.

15.2 Chemical safety assessment

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

Section 16: Other Information

IARC and SCOEL publications

In 1997, the International Agency for Research on Cancer (IARC) 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, the European Commission's Scientific Committee for Occupational Exposure Limits (SCOEL) concluded: "that the main effect in humans of the inhalation of respirable crystalline silica is silicosis. There is sufficient information to conclude that the relative lung cancer risk 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 on respirable crystalline silica, 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.

Social Dialogue on Respirable Crystalline Silica

A multi-sectoral "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 received the European Commission's financial support, is based on a Good Practice 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 Practice Guide, are available from <http://www.nepsi.eu> and provide useful information and guidance for the handling of products containing respirable crystalline silica.

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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