

SUNFLOWER LoStone Mid-fire Brush-on Glaze Safety Data Sheet

According to regulation (EC) No 2020/878

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

1.1 Product Identifier

Sunflower LoStone Mid-fire Brush-on Glaze

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

Use of the substance/mixture

Glaze coating for ceramic objects.

1.3 Details of the supplier of the safety data sheet

Valentine Clays Limited

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Stoke on Trent

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e: sales@valentineclays.co.uk

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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 contains **zinc oxide** and is classified as **Aquatic Acute 3 (H402)**, **Aquatic Chronic 3 (H412)**. Zinc oxide is hazardous to the aquatic environment, with long-term effects.

No other significant hazards are presented by this mixture under normal conditions of use in its liquid form. The crystalline silica (quartz) and clay components are bound within a wet matrix and do not pose an inhalation hazard.

Products containing crystalline silica are classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008 and harmful according to criteria defined in Directive 67/548/EEC due to the potential to generate respirable dust. This could arise when the product is allowed to dry out. Particular attention should be given to controlling spillages.

Prolonged/repeated exposure to high concentrations of respirable free crystalline silica dust may cause delayed lung injury (silicosis) The WHO International Agency for Research on Cancer (IARC) evaluation for silica states "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)" but additionally notes "carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of crystalline silica or on external factors affecting its biological activity or distribution of polymorphs" (IARC Monograph, Volume 68, 1997).

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In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalations of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that then relative risk of lung cancer is increased in persons with silicosis (and, apparently, not 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 existing regulatory occupational exposure limits and implementing additional risk management measures where required.

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.

2.2 Label Elements

Sunflower LoStone Mid-fire Brush-on Glaze



Hazard Statements:

- H373 - May cause damage to lungs through prolonged or repeated exposure by inhalation.
- H412 - Harmful to aquatic life with long lasting effects.

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
- P273 - Avoid release to the environment.
- P391 - Collect spillage.

2.3 Other Hazards

The mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No 1907/2006.

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Section 3: Composition/information on ingredients

3.1 Mixtures

<u>Component</u>	<u>CAS</u>	<u>EINECS</u>	<u>% Composition</u>
Quartz (Respirable Crystalline Silica)	14808-60-7	238-878-4	<4
Kaolin	1332-58-7	310-194-1	<2.5
Zinc Oxide	1314-13-2	215-222-5	<2.5
Glass frit	65997-18-4	66-047-6	>50
Lithium Carbonate	554-13-2	209-062-5	<1.5

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation- Remove patient to fresh air, loosen tight clothing and seek medical advice.

After Ingestion- Wash out mouth, drink plenty of water. DO NOT MAKE PATIENT VOMIT.

After Eye Contact- Rinse immediately with plenty of water. If irritation persists, seek medical advice.

After Skin Contact- Wash affected areas with water

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5: Firefighting Measures

5.1 Extinguishing Media

Suitable extinguishing media

This material is non-combustible and does not give off any harmful gases when involved with fires and will not react with other materials or fire extinguishing media.

Extinguishing media that must not be used for safety reasons

None known.

5.2 Special Hazards arising from the substance mixture

None known.

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5.3 Advice for firefighters

Protective Equipment

Employ protective equipment commonly used in the event of a fire

Additional Information

No further relevant information available.

Section 6: Accidental Release Measures

6.1 Personal Precautions, protective equipment and emergency procedures

Eye protection should be worn to prevent splashes to eye

6.2 Environmental Precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Small Spills: Use generic chemical spill response kits, absorbent pads, or damp paper towels to soak up the liquid.

Large Spills: Pour loose inert absorbents like sand or dry earth directly onto the pool

6.4 Reference to other sections

Treat the recovered material as prescribed in section 13 on waste disposal.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Advice of Safe Handling

Spillage should be prevented during transfer operations and precautions taken to prevent splashing to body and eyes. When handling all materials observe good standards of hygiene (when using do not eat, drink or smoke and wash hands after use). Avoid swallowing, inhaling dust and eye/skin contact through the use of personal protective equipment. When dry material has to be handled, dust masks with normal protection factor (NPF) of 10 (EN149) should be worn. Keep out of reach of children.

Advice on protection against fire and explosion

No special measure required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep packaging tightly closed. Keep out of reach of children.

Further Information on Storage Requirements

No special requirements.

7.3 Specific end use(s)

No further relevant information available.

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Section 8: Exposure Controls/ Personal Protection

8.1 Control Parameters

Exposure Limits

<u>CAS No</u>	<u>Substance</u>	<u>ppm</u>	<u>mg/m³</u>	<u>Fibres/ml</u>	<u>Category</u>	<u>Origin</u>
14808-60-7	Quartz (respirable crystalline silica)	-	0.1	-	TWA (8 hours)	WEL
		-		-	STEL (15 mins)	WEL
1314-13-2	Zinc Oxide (inhalable dust)	-	10	-	TWA (8 hours)	WEL

Additional Information

Silica only becomes airborne when the product is dried.

Zinc oxide only becomes airborne when the product is dried.

8.2 Exposure Controls

Occupational Exposure Controls

Dry materials should be used under conditions of local exhaust ventilation to avoid inhalation of dust. Where it is not possible, wear a suitable NIOSH-approved or EN149 respirator if processing the dried product.

Protective and Hygiene Measures

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 and beverages. Remove all soiled and contaminated clothing. Observe proper hand hygiene protocols.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Form- Liquid

Colour- Yellow

Odour- Almost odourless

pH- 5-9

Water Solubility - Insoluble

Changes in the physical state

Flash Point- No data available

Melting Point- 900°C min

Boiling Point- No data available

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Evaporation Rate- No data available

Flammability- Not flammable

Solubility- Insoluble in water

Oxidising Properties- Not oxidising

Burn Rate- No data available

9.2 Stability and Reactivity

No known hazardous reactions or decomposition products within the sphere of its intended use as a ceramic material.

9.3 Chemical Stability

No decomposition if stored normally.

9.4 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

9.5 Conditions to avoid

No dangerous reaction known under conditions of normal use.

9.6 Incompatible materials

No further relevant information available.

9.7 Hazardous decomposition products

No further relevant information available.

Section 11: Toxicological Properties

11.1 Information on toxicological effects

Mild irritant to skin and eyes. No known toxic effects on ingestion. Drying out of product will permit respirable particles of crystalline silica to become airborne with the risk of inhalation and retention in lungs. SEE SECTION 2.

Section 12: Ecological Information

12.1 Toxicity

Material contains <2.5% Zinc Oxide which is hazardous to the aquatic environment and may cause long-term adverse effects in water systems. Do not allow undiluted product to reach ground water, water courses, or sewage networks.

12.2 Persistence and degradability

Not known.

12.3 Bio accumulative potential

No further relevant information available.

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12.4 Mobility in soil

No further relevant information available.

12.5 Other adverse effects

No further relevant information available

Section 13: Waste Disposal

13.1 Waste treatment methods

Waste glaze must be treated as hazardous waste. Do not pour leftover liquid glaze down the sink drain or into household waste. Dispose of contents and containers at a licensed chemical waste collection site in accordance with local regulations.

Section 14: Transport Information

14.1 UN number

Not applicable.

14.2 UN proper shipping name

Not restricted.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packaging group

Not applicable.

14.5 Environmental hazards

No.

14.6 Special precautions for user

Not a hazardous material with respect to these transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Section 15: Regulatory Information

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

Classification for Supply

Slop Material- Warning

Dry Material- Warning

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References

EH40- Workplace Exposure Limits 2005

Guidance Notes EH44- Dust General Principles of Protection

HS (G)53- Respiratory Protective Equipment

COSHH ACOP41- Pottery Production Guidance Note EH59

Reach Regulation (EC) No 1907/2006- Annex V7

CLP Regulation (EC) No 1272/2008

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

Section 16: Other Information

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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