According to regulation (EC) No 2020/878



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

1.1 Product Identifier

Flint

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

Use of the substance/mixture

For use in ceramics

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

Products contain crystalline silica and therefore are classified as STO2 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).

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 be 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 Assessments 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.

According to regulation (EC) No 2020/878



2.1 Classification of the substance or mixture

H373

Full text of H statements: see section 16

2.2 Label Elements



WARNING STOT RE2

Hazard Ingredients:

H373 – Respirable Crystalline Silica

Hazard Statements:

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

Precautionary Statements:

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P285 – In case of inadequate ventilation wear respiratory protection.

P501 - Dispose of contents/containers to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Section 3: Composition/information on ingredients

3.1 Main Constituent

| Name | Product Identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
|---|--|------|--|--|
| Flint (Silicon dioxide) | (CAS No.) 93821-35-3 (EC No.) 298-722-6 | 97.5 | STOT RE 2, H373 | |
| Respirable crystalline silica content (by volume) - < 25% | | | | |

3.2 Impurities

| Name | Product Identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-------------------------------|---|-----|---|
| Limestone (Calcium Carbonate) | (CAS No.) 1317-65-3 (EC No.) 215-279-6 | 2.5 | Not a hazardous substance |

Section 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation- Remove person to fresh air and seek medical advice if necessary

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 skin with plenty of water.

According to regulation (EC) No 2020/878



Section 5: Firefighting Measures

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.

Section 6: Accidental Release Measures

Eye protection should be worn to prevent splashes to eyes.

Spillages of slop material should be removed with copious amounts of water to factory drainage system. Spillages of semi-dry or dry product should be removed by vacuum methods.

Section 7: Handling and Storage

Slop material should be agitated during storage to prevent setting. 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 industrial hygiene.

Avoid swallowing, inhaling dust and eye skin contact through the use of personal protective equipment. Where dry material has to be handled, dust masks with normal protection factor (NPF) of 10 (EN149) should be warn.

Section 8: Exposure Controls/ Personal Protection

Dry materials should be used under conditions of local exhaust ventilation to avoid inhalation of dust. Where it is not possible, an appropriate dust mask must be worn.

Other than suitable protective clothing, no special controls are needed in case of slop of 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.

Workplace Exposure Limit (WEL) – EH40:

Total Respirable Dust: 0.1mg/m3 (UK)

Section 9: Physical and Chemical Properties

Appearance- As a damp lump or powder, grey in colour

pH - 5-9

Relative evaporation rate (butyl acetate=1) No data available

Melting Point- 1000°c min

Flammability (solid, gas)- Non flammable

Oxidising Properties- Not oxidising

Solubility- Insoluble in water

Section 10: Stability and Reactivity

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

According to regulation (EC) No 2020/878



Section 11: Toxicological Information

Mild irritant to skin and eyes.

No known toxic effects on ingestion.

Drying out the 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

Material is extremely inert, being resistant to decomposition by weathering, biological activity and further oxidisation.

Large aquatic discharges may lead to localised adverse physical effects to aquatic organisms due to the suspension of the material in water and silting.

Section 13: Disposal Information

Material should be treated as industrial waste and the procedures laid down in the Duty of Care- Environmental Protection Act observed. Consult local Authority if necessary.

Section 14: Transport Information

No special precautions. International regulation on the transport of dangerous goods (IMDG, IATA, ADR) not applicable.

Section 15: Regulatory Information

15.2 Classification for Supply

Slop Material- Unclassified

Pugged/Press-cake Clay- Unclassified

Semi-dry Material- Warning

Dry Material- Warning

15.2 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 1907/2007- Annex V.7

CLP Regulation (EC) No1272/2008

According to regulation (EC) No 2020/878



Section 16: Other Information

Full text of H- and EUH statements:

STOT RE 1 Specific target organ toxicity- Repeated exposure, Category 1.

H372 Causes damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

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.

Date of Issue: September 2024

Disclaimer: Every care is taken in compiling this information and is believed accurate and reliable as of the date indicated. However, Valentine Clays Ltd disclaims all liability for any loss, damage or expense arising from any inaccuracy therein. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use.