

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

1.1. Product identifier

Product Name Aggregate 0.2–0.5mm Molochite

Product Inclusion This document covers 0.2 - 0.5mm Molochite Aggregate only.

Container Size Various

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

Identified Uses Main applications (non-exhaustive list)

Ceramics (refractories, sanitaryware, tiles, tableware, enamels, glass, etc.)

Fillers

Building materials & cement

Plastic & rubber

Paint

Adhesives & sealants

Fertiliers and agricultural products

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Meon Ltd.

Railside

Northarbour Spur Portsmouth PO6 3TU

+44 (0) 23 9220 0606 mail@meonuk.com

1.4. Emergency Telephone Number

Emergency telephone +44 (0) 808 118 1922

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Physical hazards:Not ClassifiedHealth hazards:Not ClassifiedEnvironmental hazards:Not Classified

Human health: 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.

Environmental: Product is not expected to be hazardous.

Physicochemical: Product should be handled with care to avoid dust generation.

2.2. Label Elements

EC Number: 296-473-8 **Hazard statements**: Not Classified

2.3. Other hazards

The 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

SUBSTANCE [] MIXTURE [X]

Substance

Name	Cas-No:	R-Phrases	Amount
	EC No:	CLP Hazard Statements	
	Reach No:		
Kaolin, Calcined	92704-41-1	Not Classified	100.0%
	296-473-8	Not Classified	

This product is 100% Calcined Kaolin, which is a UVCB substance sub-type 4. This product

does not contain any SVHC substances at levels greater than 0.1 % by weight.

Chemical name Aluminium Silicate

REACH registration notes Exempted in accordance with REACH Annex V.7

Constituent contributing to classification

This product contains less than 1% of Respirable quartz, CAS-No.: 14808-60-7 EC No.: 238-878-4.

The classification of the product is shown in section 2 of this safety data sheet.

SECTION 4: First aid measures

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

4.1. Description of first aid measures

General advice

In case of inhalation: Move the affected individual from the exposed area into fresh air, keep warm and

comfortable and seek medical attention if symptoms persist.

In case of skin contact: No first aid measure required.

In case of eye contact: Do not rub eyes, rinse with copius quantities of water and seek medical attention if

irritation persists.

In case of ingestion: Rinse mouth thoroughly with water and seek medical attention if symptoms persist.

Self-protection of the first aider: None.

4.2. Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

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

Suitable extinguishing media Extinguishing media which must No specific extinguishing media is needed

None known.

not be used for safety reasons

2 | 8

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or

Non combustible. No hazardous thermal decomposition.

mixture

Hazardous combustion products No specific data.

5.3. Advice for firefighters

Special precautions for

firefighting

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

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

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 section 8 and 13.

6.5. Additional information

No information.

SECTION 7: Handling and storage

7.1. Precautions on 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 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. Store packaged products in a dry area, keep containers closed so as to prevent accidental bursting.

7.3. Specific end uses

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).

Occupational exposure limits

A European Binding OEL (Occupational Exposure Limit) for respirable crystalline silica dust is set at 0.1 mg/m³ in the Directive (EU) 2017/2398, measured as an 8-hour TWA (Time Weighted Average).

CALCINED KAOLIN

Long-term exposure limit (8-hour TWA): WEL 2.0 mg/m3 respirable dust

Inorganic dust Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Quartz Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³ respirable dust

WEL = Workplace Exposure Limit

Maintain personal exposure below occupational exposure limits for dust (inhalable and respirable) as dictated in the national legislation.

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.

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.

Eye/face protection Wear safety glasses with side-shields in circumstances where there is a risk of penetrative

eye injuries.

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.

Skin protection-other 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.

Environmental exposure controls All ventilation systems should be filtered before discharge to atmosphere.

Avoid releasing into the environment. Contain the spillage.

Hygiene measures

When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of

skin.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance: Solid (grains, powder) Colour: White/off-white. Odour: Odourless

Ph (100 g/l in water at 20°C): 5-8@10% Slurry Melting point: > 450°C EU Method A1

Relative density: 2.6 - 2.7 g/cm3 **Bulk density:** 0.2 - 0.9g/cm3

Solubility: Solubility in water: negligible $(<10^{-2}g/I)$

Solubility in hydrofluoric acid: yes

Flammability (solid, gas): Non flammable EU method A10

Explosive properties: There are no chemical groups present in the product that are associated

with explosive properties.

9.2. Other information

No information.

4 | 8

SECTION 10: Stability and reactivity

10.1. Reactivity

Inert, not ractive.

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

Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

Toxicity values

Hazardous ingredients:

Name According to EEC	Oral LD50 (RAT)	Dermal LD50 (RAT)	Inhale LC50 (RAT)
CALCINED KAOLIN		LD_{50} >5000 mg/kg bw, Dermal, Rat (40 CFR Part 160)	LC50 >2.19 mg/l, Inhalation, Rat OECD 403

11.1. Information on toxicological effects

Inhalation: Dust in high concentrations may irritate the respiratory system.

Ingestion: No harmful effects expected from quantities likely to be ingested by accident.

Skin contact: Prolonged contact may cause dryness of the skin. **Eye contact:** Particles in the eyes may cause irritation and smarting.

Carcinogenicity In studies where kaolin has been administered via intratracheal installation, kaolin

behaves as a poorly soluble particulate of low toxicity with inflammatory responses of lung tissue. Epidemiological studies covering a large number of workers did not reveal an explicit association between kaolin exposure and tumour formation. In summary, no concern on carcinogenicity is triggered by animal studies or by

epidemiological findings Read-across data.

Specific target organ toxicity:

STOT (single exposure)
STOT (repeated exposure)

No organ toxicity observed in acute tests.

Based on the results from animal studies (mainly via intratracheal administration) it seems that the severity of effects seen in the lungs may be related to the level of crystalline silica (fine fraction) present in the material as an accessory mineral. Epidemiological studies show that exposure to high levels of kaolin dust may lead to pneumoconiosis. Results indicate that the effects from kaolin exposure are typical of those seen with poorly soluble particles under conditions of lung overload i.e. the lungs clearance capacity has been exceeded. It is likely that the severity of any effects are related to the level of crystalline silica (fine fraction) present in the

material as an accessory mineral. Read-across data.

Aspiration hazard No specific test data are available.

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity Acute toxicity (fish) LC₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss

(Rainbow trout) OECD 203

Acute toxicity aquatic invertebrates

EC₅₀, 48 hours: >700 mg/l, Daphnia magna OECD 202

Acute toxicity aquatic plants

EC₅₀, 72 hours: >1000 mg/l, Freshwater algae OECD 201

12.2. Persistence and degradability

Not applicable

12.3. Bioaccumulative potential

Not applicable

12.4. Mobility in soil

Negligible.

12.5. Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

No specific adverse effects known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/ unused products

This mineral can be disposed of as a non toxic/inactive material in approved landfill sites in accordance with local regulations. 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 receptables. Recycling and disposal of packaging should be carried out in compliance with local regulations. The reuse of packaging is not recommended. Recycling and disposal of packaging should be carried out by an authorised waste management company.

SECTION 14: Transport information

Transport class

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	1	-	-
14.2 Description of the goods	1	-	-
14.2 UN proper shipping name	1	-	-
14.3 Transport hazard classes	Not Classified	Not Classified	Not Classified
Danger releasing substance	-	-	-
Labels	-	-	-
Category	-	-	-
Factor	-	-	-
Classification Code	-	-	-
Tunnel restriction code	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	Not relevant.		
EmS		-	
14.6 Special precautions for	Avoid any release of dust during transportation, by using air-tight tanks for powders and		
user/additional information	covered trucks for other dry forms.		
Stowage category		-	

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant.

6 | 8

SECTION 15: Regulatory information

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

National Rugulations EH40/2005 Workplace exposure limits.

Health and Safety at Work etc. Act 1974 (as amended).

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002

No. 2677) (as amended).

15.2. Chemical safety assessment

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

SECTION 16: Other information

Relevant R- phrases and H-phrases

-

List of Wastes" Acronym & Abbreviation Key:

BMGV Biological Monitoring Guidance Values are given in Table 2 of EH40/2005 Workplace exposure limits.

Sk Can be absorbed through the skin. Dermal absorption may lead to systemic toxicity.

CLP Classification, Labelling & Packaging Regulation

EC European Commission

EU European Union

US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit

STEL Short term exposure limit

OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter

TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits

VOC Volatile organic compounds

g/I Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable

LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration

IC50 Half maximal inhibitory concentration

PBT Persistent bioaccumulative toxic chemical

vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road

RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code

IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of

IBC International Bulk Container

General information

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. 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 crystalline silica (fine fraction). Literature references are available on request from EUROSIL, the European Association of Industrial Silica Producers.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

8 | 8