

SPECIAL PLASTERS

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MATERIAL SAFETY DATA SHEET – SINTALITE (all grades)

Section 1 - Material Identity

Product Trade Name: Sintalite
Common Names(s): Calcined China Clay, Calcined Kaolin
Chemical Name: Calcined Kaolin
Physical Form: White Granular

Section 2 - Composition/Information on Components

Dry Calcined China Clay

Calcined china clay grades are formed by the calcination of naturally occurring china clay (also known as kaolin). Calcination causes the china clay to undergo a gradational phase change from natural china clay to metakaolin, then alteration to an amorphous defect spinal structure through to the final formation of mullite. The latter phase changes also give rise to amorphous silica rich components. All dry calcined products may be considered similar in respect to their potential health hazards.

Calcined kaolin

An OES (Occupational Exposure Standard) for calcined kaolin is not quoted. However Kaolin has an OES of 2.0 mg/m³ in a TWA 8hr reference period for respirable dust and this should be adopted for calcined china clay. Sintalite products comprise 100wt% calcined china clay with no additional ingredients.

Calcined china clay may contain the following constituents.

Crystalline Silica

The maximum exposure limit for respirable crystalline silica dust is 0.3mg/m³ in a TWA 8hr reference period. Sintalite may contain trace quantities of crystalline silica.

Amorphous silica

The Occupational Exposure Standard (OES) for amorphous silica is 6mg/m³ of inhalable dust and 2.4mg/m³ of respirable dust in a TWA 8hr reference period. Sintalite may contain up to 0.2 wt % quartz. A proportion of this silica may become available in the respirable fraction. The level of exposure to respirable silica will depend on the actions performed on the product during handling and use. Exposure levels should, therefore, be measured during use, in comparison to relevant occupational exposure limits, as exposure cannot be determined from bulk product analysis.

Mullite

CAS number: 1302 - 93 – 8. There are no specified exposure limits for mullite.

Section 3 - Hazard Information

Calcined China Clay is of low acute toxicity. Long term exposure to any mineral dust could cause damage to the respiratory system. Calcined China Clay could cause dryness and abrasion to the skin with prolonged contact. Eye contact: Airborne dust may cause irritation to the eyes. Wet Calcined China Clay spillage can constitute a slipping hazard.

Section 4 - First Aid Measures

- 4.1 **Inhalation of Dust** Remove to fresh air. If any symptoms develop seek medical aid.
- 4.2 **Skin Contact** Wash with soap and water.
- 4.3 **Eye Contact** Flush with clean water.
- 4.4 **Ingestion** Rinse mouth out with water.

Section 5 - Fire Fighting Measures

Non flammable – no special precautions necessary.

Section 6 - Accidental Release Measures

Collect dry granular material using a vacuum cleaner or other means where dust is not generated. Mix slurry (water and calcined clay) with dry, inert, absorbent solid and collect for disposal. Do not discharge slurry to a water course.

Section 7 - Handling and Storage

7.1 **Handling** Appropriate controls should be used to avoid generating dust when handling dry powders. No special precautions are indicated when handling slurries.

7.2 **Storage** Granular materials should be stored in a dry covered area, slurries should be stored in covered containers.

Section 8 - Exposure Control/Personal Protection

8.1 Respiratory Protection Use appropriate engineering controls to avoid dust generation when handling powders. Ensure that all occupational exposure standards are observed. Appropriate personal protection such as face masks should be worn.

8.2 Skin Protection Substance may have a drying and /or abrasive effect on the skin. Maintain good standards of industrial hygiene.

8.3 Eye Protection Wear safety glasses or chemical goggles to prevent eye contact. Do not wear contact lenses when working with this substance.

Section 9 - Physical and Chemical Properties

9.1 Appearance White granular

9.2 Odour None

9.3 pH Not Applicable

9.4 Boiling point Not Applicable

9.5 Explosive Properties None

9.6 Oxidising Properties None

9.7 Relative Density Dry powder – 2.6

Section 10 - Stability and Reactivity

Stable and non reactive.

Section 11 - Toxicological Information

11.1 Inhalation of Dust Calcined china clay has no determined acute toxic effects. Exposures to calcined china clay dust should be kept to below the occupation exposure standard, at which level no effects on chest health would be expected. Studies have not indicated any significant sensitisation, carcinogenic, mutagenic or teratogenic effects.

11.2 Skin Contact No determined toxicological effects.

11.3 Ingestion No determined toxicological effects.

Section 12 - Ecological Information

12.1 Environmental Statement Calcined china clay is persistent and non biodegradable but is unlikely to have any long term effects on the environment.

12.2 Mobility Solid. Non-volatile. Insoluble in water.

12.3 Degradability Non biodegradable. Persistent.

12.4 Accumulation No bio-accumulation or bio-magnification identified.

12.5 Ecotoxicity Calcined china clay is non toxic to fish, daphnia and aquatic algae, soil organisms and plants/animals.

Section 13 - Disposal Considerations

Calcined china clays can be disposed of as non toxic/inactive material in approved landfill sites in accordance with local regulations.

Section 14 - Transport Information

Calcined china clays are not classified as dangerous for transportation under EU or UK national regulations.

No special precautions are required.

Section 15 - Regulatory Information

15.1 Classification Calcined china clay is not classified as dangerous to supply under EU or UK national regulations.

15.2 Occupational Exposure Standards Calcined china clay does not have a specified OES. It is recommended that the OES for kaolin of 2 mg/m³ respirable dust in a 8hr reference period is used.

15.3 Legislative Requirements The following are relevant measures under UK legislation but the user's attention is drawn to the possible existence of additional provisions which complement these regulations. Refer to all applicable local, national and international regulations and provisions. Health and Safety at Work Act (HSWA) Control of Substances Hazardous to Health (COSHH) Environmental Hygiene Guidance (EH40) – revised annually. The information contained in this Material Safety Data sheet does not constitute an assessment of workplace risks.

Section 16 - Other Information

16.1 Training Advice Workers should be trained to handle products without generating dust or spillages.

The information contained in this Safety Data Sheet supersedes all previous such sheets and is based upon the Company's current knowledge at the date of preparation. It is given in good faith, without any warranty, expressed or implied, regarding its correctness or completeness. The conditions or methods of handling, storage, use or disposal of the product are beyond our knowledge. It is the sole responsibility of the user to take all precautions required in handling the product.

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