

1. IDENTIFICATION OF SUBSTANCES / PREPARATION AND COMPANY

Product Name: Refractory Paste

Product Code: 0309-11

Application: Custom trays for crowns and bridges

Company: Davis Schottlander & Davis Ltd

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2. HAZARD IDENTIFICATION

H315 - Causes skin irritation



Warning

During processing release of fine ceramic dust can occur. Thus mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure. These affects are usually temporary.

3. **COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical characterisation:

Component	w/w %	CAS Nr.	EINECS Nr
Alkaline earth silicate wools	16-20	436083-99-7	-
Pyrogenic sillic acid	6-9	10279-57-9	-
Carboxymethylcellulose Na-salt	1-3	9004-32-4	-
Benzoic acid	0-1	65-85-0	200-618-2
Desalinated Water H ₂ 0	balance	7732-18-5	-

4. FIRST AID MEASURES

After contact with eyes: Rinse opened eye immediately with plenty of water for

several minutes. Do not rub eyes.

After contact with skin: Rinse with plenty of water. Remove contaminated clothes. **After ingestion or inhalation:** Rinse mouth with water. Blow nose. Move to a dust free

area and seek medical attention.

5. FIRE FIGHTING MEASURES

Non combustible products. Packaging and surrounding materials may be combustible.

Suitable extinguishing media: Use fire extinguishing methods suitable for surrounding

conditions.



Special hazards: None **Other information:** None

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up/taking up: Wipe off with damp cloth and rinse off residues with

water.

7. HANDLING AND STORAGE

Handling: Avoid any uncontrolled spread

Storage: Product must be stored in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hygiene standards and exposure limits:

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. If no regulatory dust or other standards apply a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection. Examples of exposure limits applying (in Jan 2003) to mineral wools in different countries are given below.

Country	Exposure Limit*	Source
Germany	6 mg/m ³ or 3 mg/m ³	TRGS 900
France	1.0 f/ml	Circulaire DRT No 95-4 du 12.01.95
U.K.	2.0 f/ml and 5 mg/m^3	HSE-EH40 – Maximum exposure limit

^{*}Time weighted average concentrations of airborne respirable fibres measured over 8 hours by the conventional membrane filter method or the total inhalable dust using standard gravimetric techniques.

Dust reducing possibilities:

Local exhaust ventilation, which collects dust at source, can be used. Keep the workplace clean. Use a vacuum cleaner fitted with a HEPA filter. Avoid brushing and compressed air.

Respiratory protection:

At high dust concentrations FFP2 respirators may be used on a voluntary basis.

Hygiene measures:

Typical occupational hygiene is required.

Personal protective equipment:

Wear protective gloves if necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paste
Colour: Colourless
Odour: Odourless

Physical Data

Melting Point: -4°C

Boiling Point: > 100°C (1013 hPa)

Flash Point: -



Ignition Temperature:

Lower Explosion Limit:

Upper Explosion Limit:

Vapour Pressure at 20°C:

Density at 20°C: 1,09-1,21 g/cm³

Rel. Vapour Density at 20°C:

Solubility in water: Restricted

Miscibility: pH-value (20°C): 6-7
Hazardous reactions: None
Additional information: None

10. STABILITY AND REACTIVITY

Thermal decomposition: No decomposition if used according to directions.

Hazardous decomposition products: None Other information: None

11. TOXICOLOGY INFORMATION

Irritant properties:

When tested using approved methods (Directive 67/548/EEC Annex 5, Method B4), fibres contained in this material give negative results. All man-made mineral fibres, like some natural fibres, can produce a mild irritation resulting in itching or rarely in some sensitive individuals a slight reddening. Unlike other irritant reactions this is not the result of allergy or chemical skin damage but is caused by mechanical effects.

Other animal studies:

Fibres contained in the product listed in the title have been designed to be rapidly cleared from lung tissue. This low biopersistance has been confirmed in many studies on AES using EU protocol ECB/TM/27 (rev. 7) and the German method specified in TRGS 905 (1999). When inhaled, even at very high doses, they do not accumulate to any level capable of producing a serious adverse biological effect. In lifetime chronic studies there was no exposure-related effect more than would be seen with any "inert" dust. Sub-chronic studies at the highest doses achievable produced at worst a transient mild inflammatory response. Fibres with the same ability to persist in tissue do not produce tumours when injected into peritoneal cavity of rats.

12. ECOLOGICAL INFORMATION

Elimination: Not applicable Ecotoxical impact: No data available

Additional information: Ecological investigations have not been performed yet.

13. DISPOSAL CONSIDERATIONS

Smaller quantities can be disposed of with household waste.



14. TRANSPORT INFORMATION

Road transport:

ADR Not restricted RID Not restricted

Marine transport:

IMDG/UN Not restricted

Air transport:

ICAO/IATA-DGR Not restricted

Despatch by post Permitted

15. REGULATORY INFORMATION

Fibre classification according to Directive 67/548/EEC X_i irritant / R38 – skin irritating

According to Directive 67/548/EEC, the fibre contained in this product is a mineral wool belonging to the group of "man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxide ($Na_2O+K_2O+CaO+MgO+BaO$) content greater than 18% by weight".

Under Directive 67/548/EEC all types of man-made vitreous (silicate) fibres are classified as "irritant" despite the fact that testing by the appropriate EU method (B4 in Annex 5 of Directive 67/548/EEC) is providing no response and would not result in irritant classification.

Under criteria listed in nota Q of Directive 67/548/EEC, fibres contained in the products listed in the title are exonerated from carcinogen classification because of low pulmonary biopersistance measured by the methods specified in European Union and German regulations (EU protocol ECB/TM/27 (rev.7) and German method as specified in TRGS 905 (1999).

16. FURTHER INFORMATION

The data given above covers exclusively the safety requirements of the product(s) and is based on our current knowledge and experience. It does not signify any warranty with regards to the products properties. This product is only supplied for specific uses in dentistry and must be used in accordance with the directions for use.