

DENFOTEX

MSDS/MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

Product Name: Sylc®
Common Name: Bioactive Glass
Company Name: Denfotex Research Ltd.
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Burnside Business Court, North Road,
Inverkeithing KY11 1NZ, UK
Tel; +44 1383 411555
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Chemical Name: 45S5 Bioglass – calcium sodium phosphosilicate
Chemical Family: Oxide Glasses
Formula: See Section 2

1 HEALTH
0 FIRE
0 REACTIVITY

SECTION 2. COMPOSITION/CLASSIFICATION

Composition: 45S5 Bioglass®

Elemental Component	Approx Wt. %
Silicon	21
Calcium	18
Sodium	18
Phosphorus	3
Oxygen	40

SECTION 3. HAZARD IDENTIFICATION

Inhalation: Inhaling very large quantities (overexposure to particles) may cause temporary irritation to mucous membranes.
Ingestion: This material is unlikely to be hazardous by ingestion.
Skin Contact: Not absorbed through skin. No evidence of adverse effects.
Eye Contact: May cause irritation, redness and pain.

SECTION 4. EMERGENCY HELP AND FIRST AID PROCEDURES

Inhalation: Remove from exposure. Get medical attention if experiencing over exposure effects.
Ingestion: Induce vomiting in a conscious person, get medical attention.
Skin: Wash with plenty of soap and water.
Eyes: Flush with water for several minutes. Get medical attention. Take care not to rub eyes as glass particles may scratch surface of eye.

SECTION 5. FIRE AND EXPLOSION HAZARD

Non-combustible. Use extinguishing media appropriate to surrounding fire conditions.

SECTION 6. SPILLS OR ACCIDENTAL WASTE PROCEDURE

Spills should be cleaned up with a broom and dust pan or vacuum depending on size of spill. Take care not to inhale or ingest dust. Waste can be placed in a plastic trash bag to be disposed of according to applicable regulations.

SECTION 7. HANDLING AND STORAGE

No special precautions necessary. It is recommended that material be stored in unopened containers at ambient temperature (55-85°F) and humidity (rH<70%).

SECTION 8. RESTRICTION FOR EXPOSURE/PERSONAL PROTECTION

Protective safety glasses or goggles as well as gloves recommended as well as surgical mask when using the material. Use with adequate ventilation.

SECTION 9. PHYSICAL PROPERTY

Appearance/odor: Odorless white granules of glass or odorless white powder

Density: ≈ 2.73 grams/cc

Softening Point: ≈ 627 °C

Particle size: 25 - 120 μm

Solubility in water: unknown

Boiling point: N/A

Percent volatile: N/A

Vapor density: N/A

Evaporation rate: N/A

Vapor Pressure: N/A

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong acids

Decomposition: N/A

Polymerization: Hazardous polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Route of entry: Inhalation? - No

Skin? - No

Ingestion? - No

Health Hazards: None known

(acute and chronic)

SECTION 12. ECO-TOXICOLOGICAL INFORMATION/DECOMPOSITION

Stable to decomposition. Long term effects may include slight leaching of Na, Ca and P

SECTION 13. HANDLING OF WASTE

Waste can be placed in a plastic trash bag to be disposed of according to applicable regulations.

SECTION 14. INFORMATION ABOUT TRANSPORT

No special precautions required.

SECTION 15

EXISTING REGULATION

No known current risk classification.

SECTION 16

OTHER INFORMATION

N/A