



## MSDS/MATERIAL SAFETY DATA SHEET

### SECTION 1. PRODUCT IDENTIFICATION

Product Name: Sylc™  
Common Name: Bioactive Glass  
Company Name: OSspray Ltd.  
Hodgkin Building  
King's College London  
Guy's Hospital Campus  
London SE1 1UL

Chemical Name: calcium sodium phosphosilicate  
Chemical Family: Oxide Glasses  
Formula: See Section 2

1 HEALTH  
0 FIRE  
0 REACTIVITY

### SECTION 2. COMPOSITION/CLASSIFICATION

Composition:

<u>Elemental Component</u>	<u>Approx Wt.%</u>
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:  $\approx 2.73$  grams/cc  
Softening Point:  $\approx 627$  °C  
Particle size: 25 - 120  $\mu\text{m}$   
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 – See Section 3  
Skin – No reactions known  
Ingestion – No reactions known  
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