

# Material Safety Data Sheet

## 1. MATERIAL & COMPANY IDENTIFICATION

**Product Name** : SmartGrip 532 Plus FS Grey / White  
**Manufacturer** : S3 Technologies Sdn Bhd  
**Address** : PT 5889, Jalan Changkat Larang, 31007 Batu Gajah, Perak  
**Contact** : Tel: 05-3651232 Fax: 05-3651233

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

**OPC** : Grey or White Portland Cement  
Tricalcium silicate ( $3\text{CaO}\cdot\text{SiO}_2$ ) and dicalcium silicate ( $2\text{CaO}\cdot\text{SiO}_2$ ) are Portland cement's constituent, along with varying amount of alumina, tricalcium aluminate and iron oxide as tetracalcium aluminoferrate. Small amounts of magnesia, sodium, potassium and sulfur are also present. Chromium may be present in the finish cement since kiln's refractory lining and steel balls used in the finish-milling operations are possible sources.

**CAS Reg. No.** : 65997-15-1  
**OSHA PEL** : 10 mg/m<sup>3</sup> TDust  
**ACGIH TLV** : 10 mg/m<sup>3</sup> TDust

**Silica Sand** : Silica oxide ( $\text{SiO}_2$ ) are essential constituent in silica sand.  
**CAS Reg. No.** : 14808-60-7  
**OSHA PEL** : 10 mg/m<sup>3</sup>  
**ACGIH TLV** : 0.1 mg/m<sup>3</sup> crystalline silica

**Calcium Carbonate** : Limestone  
**CAS Reg. No.** : 1317-65-3  
**OSHA PEL** : 15 mg/m<sup>3</sup> TDust  
**ACGIH TLV** : 10 mg/m<sup>3</sup> TDust 9192

**Chemical additives** : Essentially are water retention agents e.g. water-soluble cellulose ether and fluidizing agents e.g. naphthalene-sulphonate formaldehyde salts  
**CAS Reg. No.** : Propriety Mixture (Not Available)

## 3. HAZARDS IDENTIFICATION

**3.1 Ingestion**  
May cause temporary irritation to the gastrointestinal tract.

**3.2 Inhalation**  
May irritate nose, throat, and upper respiratory tract.

**3.3 Eye Contact**  
May cause eye itching, redness and pain.

**3.4 Skin Contact**  
May cause irritation.

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## 4. FIRST AID MEASURES

### 4.1 Ingestion

Never give anything by mouth to an unconscious or convulsing person. If ingested, rinse mouth with water and seek immediate medical assistance.

### 4.2 Inhalation

Move the victim to fresh air. If breathing is difficult, give oxygen; if victim is not breathing, give artificial breathing, and seek immediate medical assistance.

### 4.3 Eye Contact

Flush with plenty of water for 15 minutes and seek medical advice without delay.

### 4.4 Skin Contact

Remove contaminated shoes and clothing. Rinse affected area with large amounts of water followed by washing the area with soap and water. If irritation persists, seek medical assistance.

### 4.5 General

In all cases of doubt, or where symptoms persist, medical advice should be obtained.

## 5. FIRE-FIGHTING MEASURE

Specific Hazards : Non-Combustible material

Extinguishing Media : General extinguishing media such as water, spray carbon dioxide, chemical form type applied as appropriate for surrounding fire.

Flammability Limits : Not Applicable

Fire Fighting Advice : Non-Combustible material

## 6. ACCIDENTAL RELEASE MEASURES

Wear protective equipment to prevent skin and eye contact. Sweep, vacuum or shovel spilled material whilst trying to minimize dust generation. Dispose according to local authority guidelines. Do not allow material to enter drain or waterways.

## 7. HANDLING AND STORAGE

Handling : Avoid direct contact with skin and eyes. Bagged material should be stacked in a safe and stable manner.

Storage : Store in a dry place in the original bags.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Engineering Controls

Avoid generating dust. Where dust could be generated whilst handling product, use local mechanical ventilation or extraction to minimize exposure to those involved.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)

### 8.2 Personal Protection

When handling or mixing the dry product, avoid inhaling dust. Wear dust mask, safety glasses, chemical resistant apron and impervious gloves. Precaution should be taken to avoid skin or eye contact or ingesting the product. Always wash hand before eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	: Grey or White Powder
<b>Odour</b>	: None
<b>pH</b>	: 12
<b>Solubility</b>	: Insoluble but undergo hydration
<b>Specific Gravity</b>	: Not applicable
<b>Vapour Pressure</b>	: Approximately 0 mm Hg
<b>Vapour Density</b>	: Not applicable
<b>Viscosity</b>	: Not applicable
<b>Freezing Point</b>	: Not applicable
<b>Flammability</b>	: Not applicable

## 10. STABILITY AND REACTIVITY

### 10.2 Stability

Stable at normal temperatures when kept dry. When wet, sets to a hard lump with evolution of small amounts of heat.

### 10.3 Materials and Conditions to Avoid

Avoid moisture.

### 10.4 Hazardous Decomposition Products

Calcium hydroxide forms when water is added. Containing Portland Cement, it is an alkaline abrasive and hygroscopic material.

## 11. TOXICOLOGICAL INFORMATION

### 11.2 Ingestion

If small amounts are swallowed there are unlikely to cause any serious ill effects. If large quantities are ingested, this could result in irritation to the gastrointestinal tract.

### 11.3 Inhalation

Dust arising from preparation is not likely to cause significant disease or toxic effect if exposure is kept under reasonable control.

### 11.4 Eye Contact

May cause discomfort and irritation.

### 11.5 Skin Contact

Prolonged contact may cause irritation and drying to skin especially when wet.

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## 12. ECOLOGICAL INFORMATION

This product is not biodegradable. Avoid contaminating waterways.

## 13. DISPOSAL CONSIDERATIONS

Product should be disposed in accordance with local regulations and legal requirements.

## 14. TRANSPORT INFORMATION

No special packaging requirement. Not classified as dangerous goods under the United Nations Transport Recommendations.

## 15. REGULATORY INFORMATION

Not classified as dangerous under current regulation.

## 16. OTHER INFORMATION

The information contained in this MSDS is provided for use in assessing the hazardous nature of material. Information was prepared carefully, using current references available to us. Information provided is to be the best of our knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself/ herself as to the suitability and completeness of information provided here for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information.