



# SAFETY DATA SHEET

ST. GEORGE TECHNOLOGY, INC.

Issue Date 01-Jun-2013

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Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Excel Formula Lab Putty Catalyst

### Other Means of Identification

**SDS #** SGT-009

**UN/ID No** UN1325

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** Fabrication of dental device.

### Details of the Supplier of the Safety Data Sheet

#### **Supplier Address**

St. George Technology, Inc.  
P.O. Box 2849  
Wilmington, North Carolina 28402-2849

#### **Emergency Telephone Number**

**Company Phone Number** 910-397-0781  
Fax: 910-397-0791  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

|  |            |
|--|------------|
| Acute toxicity - Inhalation (Vapors)             | Category 4 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable solids                                 | Category 1 |

### **Signal Word**

**Warning**

### **Hazard Statements**

Harmful if inhaled  
Causes serious eye irritation  
May cause respiratory irritation. May cause drowsiness or dizziness

Flammable solids

**Appearance** Red paste**Physical State** Paste**Odor** Like esters**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Ground/bond container and receiving equipment  
 Use explosion-proof equipment  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name        | CAS No      | Weight-%    |
|----------------------|-------------|-------------|
| Tetraethyl silicate  | Proprietary | Proprietary |
| Dibutyltin dilaurate | 77-58-7     | Proprietary |

Chemical Additions      Chemical characterization: Solution of dibutyl-tin dilaurate and red dye in tetraethyl silicate based on a viscous paste

Product contains a proprietary mixture of ingredients.

### 4. FIRST AID MEASURES

**First Aid Measures****General Advice**

Provide this SDS to medical personnel for treatment.

|                     |   |
|---------------------|---|
| <b>Eye Contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.   |
| <b>Skin Contact</b> | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.   |
| <b>Inhalation</b>   | Remove to fresh air. Get medical attention if you feel unwell.  |
| <b>Ingestion</b>    | Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Induce vomiting, but only if victim is fully conscious. Call a POISON CENTER or doctor/physician if you feel unwell. |

#### **Most Important Symptoms and Effects, both Acute and Delayed**

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | <p>Skin: Irritating</p> <p>Eye: Irritation with danger of serious eye damage.</p> <p>Ingestion: Irritation symptoms of mucous membranes in the mouth, pharynx, esophagus and gastro-intestinal tract. After swallowing of large amounts: tiredness, narcosis.</p> <p>Inhalation: Irritation symptoms in the respiratory tract.</p> |
|-----------------|--|

#### **Indication of any Immediate Medical Attention and Special Treatment Needed**

|                           |                        |
|---------------------------|------------------------|
| <b>Note to Physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

### **5. FIRE-FIGHTING MEASURES**

#### **Suitable Extinguishing Media**

Foam, Dry Chemical, Carbon Dioxide.

**Unsuitable Extinguishing Media** Water.

#### **Specific Hazards Arising from the Chemical**

Forms explosive mixtures with air at elevated temperatures. Vapors are heavier than air and may spread along floors.

**Sensitivity to Static Discharge** Take precautionary measures against static discharge.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions** Wear protective clothing as described in Section 8 of this safety data sheet.

#### **Methods and Material for Containment and Cleaning Up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Clean up with liquid absorbent material. Forward for disposal. Clean up affected area.

### **7. HANDLING AND STORAGE**

**Precautions for Safe Handling****Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when handling this product. Avoid breathing vapors or mists. Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground all equipment to prevent buildup of static charge. Use explosion proof equipment. Take precautionary measures against static discharges.

**Conditions for Safe Storage, Including any Incompatibilities****Storage Conditions**

Tightly closed. Store in a well ventilated place. Keep away from sources of ignition and heat. Store locked up. Additional storage conditions: Store at 15-25°C (59°F-77°F). Store away from incompatible materials.

**Packaging Materials**

Unsuitable working materials/container materials: various plastics, rubber.

**Incompatible Materials**

Water, strong acids, strong bases, strong oxidizing agents, alkali metals, and alkaline earth metals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name                   | ACGIH TLV   | OSHA PEL   | NIOSH IDLH   |
|---------------------------------|---|--|--|
| Tetraethyl silicate             | TWA: 10 ppm   | TWA: 100 ppm<br>TWA: 850 mg/m <sup>3</sup><br>(vacated) TWA: 10 ppm<br>(vacated) TWA: 85 mg/m <sup>3</sup> | IDLH: 700 ppm<br>TWA: 10 ppm<br>TWA: 85 mg/m <sup>3</sup>                          |
| Dibutyltin dilaurate<br>77-58-7 | STEL: 0.2 mg/m <sup>3</sup> Sn<br>TWA: 0.1 mg/m <sup>3</sup> Sn<br>S* | TWA: 0.1 mg/m <sup>3</sup> Sn<br>(vacated) TWA: 0.1 mg/m <sup>3</sup> Sn<br>(vacated) S*                   | IDLH: 25 mg/m <sup>3</sup> Sn<br>TWA: 0.1 mg/m <sup>3</sup> except<br>Cyhexatin Sn |

**Appropriate Engineering Controls****Engineering Controls**

Apply technical measures to comply with the occupational exposure limits.

**Individual Protection Measures, such as Personal Protective Equipment****Eye/Face Protection**

Avoid contact with eyes.

**Skin and Body Protection**

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

**Respiratory Protection**

Required when vapors/aerosols are generated.

**General Hygiene Considerations** Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on Basic Physical and Chemical Properties**

**Physical State**  
**Appearance**  
**Color**

Paste  
Red paste  
Red

**Odor**  
**Odor Threshold**

Like esters  
Not determined

| <u>Property</u>                     | <u>Values</u>                         | <u>Remarks • Method</u> |
|-------------------------------------|---------------------------------------|-------------------------|
| pH                                  | Not available                         |                         |
| Melting Point/Freezing Point        | -77 °C / -106.6 °F                    |                         |
| Boiling Point/Boiling Range         | 169 °C / 336.2 °F                     |                         |
| Flash Point                         | 21 °C / 69.8 °F                       |                         |
| Evaporation Rate                    | Not determined                        |                         |
| Flammability (Solid, Gas)           | Not determined                        |                         |
| Upper Flammability Limits           | 23.0%                                 |                         |
| Lower Flammability Limit            | 1.3%                                  |                         |
| Vapor Pressure                      | <100 mbar                             | @ 20°C (68°F)           |
| Vapor Density                       | Not determined                        |                         |
| Relative Density (Specific Gravity) | Not determined                        |                         |
| Water Solubility                    | Insoluble in water                    |                         |
| Solubility in Other Solvents        | Not determined                        |                         |
| Partition Coefficient               | Not determined                        |                         |
| Autoignition Temperature            | 345°C / 653°F                         |                         |
| Decomposition Temperature           | Not determined                        |                         |
| Kinematic Viscosity                 | Not determined                        |                         |
| Dynamic Viscosity                   | Pasteous consistency                  |                         |
| Explosive Properties                | Not determined                        |                         |
| Oxidizing Properties                | Not determined                        |                         |
| Density                             | 1.058 g/cm <sup>3</sup> @ 20°C (68°F) |                         |

## 10. STABILITY AND REACTIVITY

### Reactivity

Avoid heating.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Excessive heat.

### Incompatible Materials

Water, strong acids, strong bases, strong oxidizing agents, alkali metals, and alkaline earth metals.

### Hazardous Decomposition Products

None if correctly stored. But moist air causes decomposition under evaluation of ethanol.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Product Information

#### Eye Contact

Causes serious eye irritation.

#### Skin Contact

Prolonged contact may cause redness and irritation.

#### Inhalation

Harmful if inhaled. May cause irritation of respiratory tract.

#### Ingestion

Ingestion may cause irritation to mucous membranes.

### Component Information

| Chemical Name                   | Oral LD50            | Dermal LD50             | Inhalation LC50 |
|---------------------------------|----------------------|-------------------------|-----------------|
| Tetraethyl silicate             | = 6270 mg/kg ( Rat ) | = 6300 µL/kg ( Rabbit ) | -               |
| Dibutyltin dilaurate<br>77-58-7 | = 175 mg/kg ( Rat )  | -                       | -               |

### Information on Physical, Chemical and Toxicological Effects

**Symptoms** Please see section 4 of this SDS for symptoms.

### Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**STOT - Single Exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

### Numerical Measures of Toxicity

Product Information

**Oral LD50** 6270 mg/kg (male rat)  
**Inhalation LC50** 1000 ppm(V)/4h

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

### Component Information

| Chemical Name                   | Algae/aquatic plants | Fish                                 | Toxicity to microorganisms | Crustacea |
|---------------------------------|----------------------|--------------------------------------|----------------------------|-----------|
| Dibutyltin dilaurate<br>77-58-7 |                      | 2: 48 h Oryzias latipes mg/L<br>LC50 |                            |           |

### Persistence and Degradability

Not determined

### Bioaccumulation

Not determined

### Mobility

Not determined

### Other Adverse Effects

Classification of water endangerment: Product is not soluble in aqueous media; After reaction with water harmful effect on aquatic organisms. For decomposition products: WGK = 1 (slightly polluting substance)

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal in compliance with official regulations. Handle contaminated packages in the same way as the substance itself. If not officially specified differently, noncontaminated packaging may be treated like household waste or recycled.

| Chemical Name                   | California Hazardous Waste Status |
|---------------------------------|-----------------------------------|
| Dibutyltin dilaurate<br>77-58-7 | Toxic                             |

## 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

**UN/ID No** UN1325  
**Proper Shipping Name** Flammable solid, organic, n.o.s. (Tetraethyl silicate)  
**Hazard Class** 4.1  
**Packing Group** II

**IATA**

**UN/ID No** UN1325  
**Proper Shipping Name** Flammable solid, organic, n.o.s. (Tetraethyl silicate)  
**Hazard Class** 4.1  
**Packing Group** II

**IMDG**

**UN/ID No** UN1325  
**Proper Shipping Name** Flammable solid, organic, n.o.s. (Tetraethyl silicate)  
**Hazard Class** 4.1  
**Packing Group** II

## 15. REGULATORY INFORMATION

**International Inventories**

Not Determined

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*  
*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*  
*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*  
*ENCS - Japan Existing and New Chemical Substances*  
*IECSC - China Inventory of Existing Chemical Substances*  
*KECL - Korean Existing and Evaluated Chemical Substances*  
*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations****SARA 313**

Not determined

**US State Regulations**

**U.S. State Right-to-Know Regulations**

| Chemical Name       | New Jersey | Massachusetts | Pennsylvania |
|---------------------|------------|---------------|--------------|
| Tetraethyl silicate | X          | X             | X            |

**16. OTHER INFORMATION**

|             |                       |                     |                         |                            |
|-------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b>NFPA</b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|             | Not determined        | Not determined      | Not determined          | Not determined             |
| <b>HMIS</b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical Hazards</b> | <b>Personal Protection</b> |
|             | Not determined        | Not determined      | Not determined          | Not determined             |

**Issue Date** 01-Jun-2013  
**Revision Date** 06-Jun-2013  
**Revision Note** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**