SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name
EXCEL FORMULA™ ULTRA-HI HEAT-CURE DENTURE BASE MATERIAL (LIQUID)

Based on methyl methacrylate:
CAS-No. 80-62-6
EU Index No. 607-035-00-6
REACH No. 01-2119452498-28
EINECS-No. 201-297-1

Other Means of Identification
SDS # SGT-002

Recommended Use of the Chemical and Restrictions on Use
Recommended Use Dental / Denture application.
Uses Advised Against For Professional use only.

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
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Corrosion/Irritation</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Signal Word

Danger

Hazard Statements Causes
skin irritation Causes severe
eye irritation
May cause an allergic skin reaction
May cause respiratory irritation. May cause drowsiness or dizziness
Highly flammable liquid and vapor

**Appearance** Colorless liquid  
**Physical State** Liquid  
**Odor** Characteristic

**Precautionary Statements - Prevention**
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

**Precautionary Statements - Response**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Get medical attention if irritation occurs  
If skin irritation or rash occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
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 CO2, 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

**Other Hazards**
Harmful to aquatic life with long lasting effects  
Harmful to aquatic life

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate Monomer</td>
<td>80-62-6</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Ethylene Glycol Dimethacrylate</td>
<td>97-90-5</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

Product contains a proprietary mixture of ingredients. *Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).*
4. FIRST AID MEASURES

First Aid Measures

**General Advice**
Provide this SDS to medical personnel for treatment.

**Eye Contact**
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Skin Contact**
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Seek medical attention if irritation develops.

**Inhalation**
Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

**Ingestion**
Rinse mouth. Do NOT induce vomiting. Seek medical advice.

Most Important Symptoms and Effects, both Acute and Delayed

**Symptoms**
Overexposure by inhalation may cause CNS depression- drowsiness, dizziness, confusion or loss of coordination. May cause skin and eye irritation. May cause allergic skin reaction. Will cause gastrointestinal tract irritation.

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

**Note to Physicians**
Treat symptomatically. Can cause allergic response in susceptible or hypersensitive individuals upon repeated or prolonged exposure.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Foam, Dry chemical, Carbon dioxide (CO2).

**Unsuitable Extinguishing Media**
Water jet.

**Specific Hazards Arising from the Chemical**
Vapors may travel to source of ignition and flash back.

**Sensitivity to Static Discharge**
Take precautionary measures against static discharge. Flammable mixtures of this product are readily ignited even by 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. Remove all sources of ignition. The wet contaminated surface may be slippery.

**Environmental Precautions**
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for additional ecological information.
Methods and Material for Containment and Cleaning Up

Methods for Containment
Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite).

Methods for Cleaning Up
Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS. Wash spill area with a mild detergent.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Wear appropriate personal protective equipment. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges. Ground container and transfer equipment to eliminate static electric sparks. Use spark-proof tools and explosion-proof equipment. Avoid breathing vapors or mists. Contaminated work clothing should not be allowed out of the workplace. Use only in well-ventilated areas. Keep containers closed when not in use. Keep cool.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Store between 16°C-25°C (69°F-79°F). Store locked up. Protect from damp. Store away from heat and incompatible materials.

Incompatible Materials
Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>STEL: 100 ppm</td>
<td>TWA: 100 ppm TWA: 410 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m³</td>
<td>IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls
Good ventilation is required.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection
Splash goggles or safety glasses.

Skin and Body Protection
Polyethylene / Nitrile gloves. Do not use cotton gloves. Polyethylene apron is recommended.

Respiratory Protection
Ensure adequate ventilation, especially in confined areas. Use NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>-48°C</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>100 °C / 212 °F</td>
<td>(at 760 mm Hg)</td>
</tr>
<tr>
<td>Flash Point Evaporation</td>
<td>8 °C / 46.4 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Rate Flammability (Solid, Gas)</td>
<td>+1</td>
<td>(butyl acetate = 1)</td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>+1</td>
<td>(Air=1)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>-1</td>
<td>(1=Water)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Slightly soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>430°C/806°F</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Prolonged exposure to elevated temperatures which can cause premature polymerization and release methyl methacrylate vapors.

Hazardous Polymerization
Hazardous polymerization may occur.

Conditions to Avoid
Temperatures >35°C (95°).

Incompatible Materials
Organic peroxides, Reducing agent, Metallic Redox systems, Strong oxidizing agents.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact
Causes serious eye irritation.
Skin Contact: Causes skin irritation. May cause allergic skin reaction.

Inhalation: May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion: Ingestion may cause irritation to mucous membranes.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>= 7872 mg/kg (Rat)</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>= 4632 ppm (Rat) 4 h = 400 ppm (Rat) 1 h</td>
</tr>
</tbody>
</table>

**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**

**Sensitization:** May cause an allergic skin reaction.

**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*IARC (International Agency for Research on Cancer)*

*Group 3 IARC components are "not classifiable as human carcinogens"*

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

**Numerical Measures of Toxicity**

Not determined

12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>170: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>243 - 275: 96 h Pimephales promelas mg/L LC50 flow-through 125.5 - 190.7: 96 h Pimephales promelas mg/L LC50 static 170 - 206: 96 h Lepomis macrochirus mg/L LC50 flow-through 153.9 - 341.8: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 79: 96 h Oncorhynchus mykiss mg/L LC50 static 326.4 - 426.4: 96 h Poecilia reticulata mg/L LC50 static</td>
<td>69: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>
Persistence and Degradability
Not determined

Bioaccumulation
Not determined

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate Monomer</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Other Adverse Effects
Not determined

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 should be in accordance with applicable regional, national and local laws and regulations.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>U162</td>
<td>Included in waste stream:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F039</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>U162</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate Monomer</td>
<td>Toxic Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

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

DOT
Consumer Commodity

IATA

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1247</td>
<td>Methyl methacrylate monomer, stabilized</td>
<td>3</td>
<td>II</td>
</tr>
</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1247</td>
<td>Methyl methacrylate monomer, stabilized</td>
<td>3</td>
<td>II</td>
</tr>
</tbody>
</table>

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
- KEC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

CERCLA

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate Monomer</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 454 kg final RQ</td>
</tr>
</tbody>
</table>

SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>Proprietary</td>
<td>1.0</td>
<td></td>
</tr>
</tbody>
</table>

CWA (Clean Water Act)

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate Monomer (Proprietary)</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

US State Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Issue Date 03-Jan-2011
Revision Date 31-May-2016
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