1. IDENTIFICATION

Product Identifier
Product Name ACRYLIC PRIMER / JET SEAL

Other means of identification
SDS# 041
UN/ID No UN1993
Product Code 1602, 1607, 1608 / 4102, 4106, 4107, 4108

Recommended use of the chemical and restrictions on use
Recommended Use Acrylic Primer - Acrylic bonding agent / Jet Seal - Acrylic sealing agent

Details of the supplier of the safety data sheet
Supplier Address Lang Dental Mfg. Co., Inc.
175 Messner Dr.
Wheeling, IL 60090
USA

Emergency telephone number
Company Phone Number +1-847-215-6622
Emergency Telephone (INFOTRAC) +1-352-323-3500 (International)
800-535-5053 (North America)

Authorized European Representative MediMark® Europe SARL
11, rue Emile Zola – BP 2332
38033 Grenoble Cedex 2
France
Tel: +33 476 86 43 22
Fax: +33 476 17 19 82
Email: info@medimark-europe.com

2. HAZARDS IDENTIFICATION

Classification
| Flammable liquids | Category 2 |
| Skin Corrosion / Irritation | Category 2 |
| Skin Sensitization | Category 1 |
| Specific Target Organ Toxicity - Single Exposure (Respiratory) | Category 3 |

Signal word Danger

Hazard statements
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
Appearance Clear or slightly tinted Physical state Liquid Odor Acrid

Precautionary Statements – Prevention
P210 Keep away from heat/sparks/open flames/ hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements – Response
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before use.
P370+P378 In case of fire: Use CO₂, for extinction.

Precautionary Statements – Storage
P235 Keep cool.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements – Disposal
P501 Dispose of contents/container in accordance with local regulation.

Hazardous component(s) for labeling Contains methyl methacrylate

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight - %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>80-62-6</td>
<td>&lt; 80</td>
<td>*</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>&gt; 10</td>
<td></td>
</tr>
</tbody>
</table>

*Specific chemical weight has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Ingestion
Do NOT induce vomiting. Drink plenty of water or milk immediately. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.

Skin Contact
Wash off immediately with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs, get medical advice/attention.
Most important symptoms and effects, both acute and delayed

Symptoms
Exposed individuals may experience eye tearing, redness and discomfort. Prolonged skin contact may cause skin irritation and redness. Prolonged exposure in poorly ventilated area may cause respiratory irritation.

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Suitable: Chemical foam, carbon dioxide (CO₂), dry chemical
Unsuitable: Water spray

Specific hazards arising from the chemical
High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Extremely flammable. Vapors of this product are heavier than air and may travel to a source of ignition and flash back to a leaking or open container. Vapor forms an explosive mixture with air.

Hazardous Combustion Products
Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

Protective equipment and precautions for firefighters
Wear self-contained breathing apparatus for firefighting if necessary. Do not enter area without proper protection. Fight fire from safe distance/protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Use water spray to cool unopened containers. Pressure relief system may plug with solids creating risk of overpressure.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal precautions
Before cleaning any spill or leak, individuals must wear personal protective equipment as required. Remove any contaminated clothing and wash thoroughly before reuse.

Environmental precautions
ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains. Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

Methods and material for containment and clean-up
Method for containment
Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. DO NOT use combustible materials such as sawdust.

Method for clean-up
Maximize ventilation and secure all sources of ignition. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap.

7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling
Keep away from heat, sparks, and flame. Keep container closed after each use. Ground and bond all containers when transferring. Do NOT use localized heat source such as band heaters to heat/melt product. Do NOT steam. Hot boxes or hot rooms are recommended for heating the product, which can be set at a maximum temperature of 60°C/140°F. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping. After use, wash hands and exposed skin with soap and water. Do not eat, drink, or smoke while handling product. Observe precautions found on the label.
**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition. Protect from direct sunlight. Keep container closed to prevent water absorption and contamination. Methacrylate stored in bulk quantities of >182 kgs (400lbs) must be kept in contact with air (oxygen). Keep at a temperature not exceeding 25°C. Vapors are uninhibited and may form polymers in vents or flame arresters, resulting in blockage of vents. Product residue may remain in empty containers.

**Packaging materials**
Keep in original container.

**Incompatible materials**
Strong oxidizing agents, strong reducing agents, free-radical generators, inert gases, oxygen scavengers.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure guidelines**
Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate 80-62-6</td>
<td>STEL: 100 ppm</td>
<td>TWA: 100 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm</td>
<td>TWA: 410 mg/m³</td>
</tr>
</tbody>
</table>

ACGIH = American Conference of Governmental Industrial Hygienists / OSHA = Occupational Safety and Health Administration
PEL = Permissible Exposure Levels / STEL – Short Term Exposure Limit / TLV – Threshold Limit Value / TWA = Time Weighted Average

**Appropriate engineering controls**
Engineering controls
Use local explosion-proof ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye / face protection**
Depending on the use of this product, safety glasses or goggles may be worn. If necessary, refer to US OSHA 29CFR SS1910.133, Canadian standards or the European Standard EN 166. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

**Skin and body protection**
If anticipated that prolonged and repeated skin contact will occur during use of this product, wear gloves for routine industrial use. If necessary, refer to US OSHA 29CFR SS1910.138 or the appropriate standards of Canada or the EC member states. Wear suitable protective clothing.

**Respiratory protection**
Wear suitable respiratory equipment if exposure to levels above the occupational exposure limit is likely. A suitable mask with filter type A may be appropriate. In the event of formation of particularly high levels of vapor, a self-contained breathing apparatus may be appropriate.

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station is recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
<th>Odor</th>
<th>Acrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks / Method</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point / Freezing point</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>101°C / 214° F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>11.5°C / 52.7°F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>n/a (liquid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability limits in air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.891</td>
<td>Water = 1</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>421°C / 790°F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
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<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not determined</td>
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<td></td>
</tr>
<tr>
<td>Other information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>0.891 g/mL</td>
<td></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**
- None under normal processing

**Hazardous polymerization**
- Hazardous polymerization may occur upon depletion of inhibitor. May cause heat and pressure build-up in closed containers.

**Conditions to avoid**
- For bulk quantities of >182 kgs (400lbs) – Prolonged temperatures above 25°C (77°F), localized heat sources (e.g. drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing

**Incompatible materials**
- Strong oxidizing agents, strong reducing agents, free-radical initiators, inert gases, oxygen scavengers.
- Material has strong solvent properties and can soften paint and rubber.

**Hazardous decomposition products**
- Acrid smoke-fumes/ carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposures**

**Product information**
- **Inhalation**: Harmful if inhaled.
- **Eye contact**: Causes severe eye irritation.
- **Skin contact**: Causes skin irritation.
- **Ingestion**: May be harmful if swallowed.
Component information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD₅₀</th>
<th>DERMAL LD₅₀</th>
<th>INHALATION TCₐ₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>-</td>
<td>-</td>
<td>4,632 mg/L</td>
</tr>
<tr>
<td>80-62-6</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>5800</td>
<td>&gt;2000</td>
<td>Vapor LD₅₀ 50.1</td>
</tr>
<tr>
<td>67-64-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Exposed individuals may experience eye tearing, redness and discomfort. Prolonged skin contact may cause skin irritation and redness. Prolonged exposure in poorly ventilated area may cause respiratory irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
May cause allergic skin reaction.

Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

STOT – single exposure
May cause respiratory irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<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 Psuedokirchneriella</td>
<td>243-275: 96 h Pimephales promelas mg/L LC50; 125.5-190.7: 96 h Pimephales; 170-206: 96 h Lepomis macrochirus mg/L LC50; 153.9-341.8: 96 h Lepomis macrochirus mg/L LC50; 326.4-426.9: 96 h Poecilia reticulata mg/L LC50; &gt;79: 96 h Oncorhynchus mykiss mg/L LC50; &gt;79: 96 h Oncorhynchus mykiss mg/L LC50 STATIC; 69: 48 h Daphnia magna mg/L EC50</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>80-62-6</td>
<td>subcapitata mg/L EC50</td>
<td></td>
<td></td>
<td>69: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Follow all local and national government regulations in disposing material or contaminated packaging.

For U.S. - Dispose of in accordance with federal, state and local regulations. When discarded, it is considered a hazardous waste by the EPA under RCRA. The reportable quantity for methyl methacrylate is 1000 lb. (40 CFR Part 302). Add excess inhibitor before disposing.

Contaminated Packaging
Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards due to residual material associated with empty containers. Dispose of all empty containers in accordance with local and national government regulations.
14. TRANSPORTATION INFORMATION

DOT

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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<tbody>
<tr>
<td>UN / ID No</td>
<td>UN1993</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>Flammable liquid, n.o.s. (Methyl Methacrylate monomer, stabilized / acetone solution)</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Reportable Quantity (RQ)</td>
<td>1000 lb. (methyl methacrylate)</td>
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</table>

IATA

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<td>UN / ID No</td>
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IMDG

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<th>Field</th>
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<td>UN1993</td>
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<td>Proper shipping name</td>
<td>Flammable liquid, n.o.s. (Methyl Methacrylate monomer, stabilized / acetone solution)</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

International Inventories
For Methyl methacrylate:

- **TSCA**  Listed  United States Toxic Substances Control Act, Section 8(b) Inventory
- **DSL**  Listed  Canadian Domestic Substances List
- **EINECS**  Listed  European Inventory of Existing Chemical Substances

**EU Regulations**
EC No. 1272/2008 (CLP) Classification, Labeling, Packaging
Medical Devices Regulation 2017/745 - Class I Medical Devices

**US Federal Regulations**
SARA 313 – Toxic chemicals – listed.

**US State Regulations**
Not established

**US State Right-to-Know Regulations**
California Proposition 65 – No Proposition 65 Reproductive Toxins exist in this product.
Pennsylvania – Methyl methacrylate CAS 80-62-6

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
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<tbody>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>2</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Effective Date  04-Jun-2018

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 guidance for safe handling, use, processing, storage, transportation, disposal and release. It 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