1. IDENTIFICATION

Product Identifier
Product Name: Amalgambond Base

Other means of identification
SDS #: S372
UN/ID No: UN1247

Recommended use of the chemical and restrictions on use
Recommended Use: Dental Adhesive System.

Details of the supplier of the safety data sheet
Supplier Address: Parkell, Inc.
300 Executive Drive
Edgewood, NY 11717

Emergency Telephone Number
Company Phone Number: (631) 249-1134
Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance: Colorless, transparent liquid
Physical State: Liquid

Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<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 (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Hazards Not Otherwise Classified (HNOC)
May be harmful if inhaled

Signal Word
Danger

Hazard Statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation
Highly flammable liquid and vapor
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

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Get medical advice / attention
IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other Hazards
Harmful to aquatic life with long lasting effects

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</td>
<td>80-62-6</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.*
4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

**Skin Contact**
Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion**
Do not induce vomiting without medical advice. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

**Symptoms**
Causes serious eye irritation and skin irritation. May cause an allergic skin reaction. Ingestion may cause headache, dizziness, nausea, tinnitus, dyspnea, etc. Inhalation can cause irritation of the upper respiratory tract and mucous membranes; at high concentrations, can cause symptoms similar to those which may be experienced upon ingestion.

Indication of any immediate medical attention and special treatment needed

**Notes to Physician**
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
Highly flammable liquid and vapor. When exposed to flame, product emits toxic fumes and gases.

**Hazardous Combustion Products**
Carbon monoxide.

**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**
Use personal protection recommended in Section 8.

**For Emergency Responders**
Remove all sources of ignition. Ventilate the area.

**Environmental Precautions**
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.
Methods and material for containment and cleaning up

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

Methods for Clean-Up
Absorb small quantities on paper towels. Evaporate in safe place such as a fume hood. Allow sufficient time for evaporating vapors to completely clear the hood duct work. Burn the paper in a suitable location away from combustible materials. Large quantities can be collected and burned in a suitable combustion chamber.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. 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 discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store under pure nitrogen or sparge with nitrogen or oxygen-free gas. Store locked up.

Incompatible Materials
Polymerization catalysts such as peroxides, persulfates, light, heat, nitric acid and other strong oxidizers, ammonia and amines, and halogens and halogen compounds.

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 80-62-6</td>
<td>STEL: 100 ppm TWA: 50 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>
<tr>
<td>Polymerizable Methacrylates</td>
<td>TWA: 5 mg/m³</td>
<td>(vacated) TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses or full face shield.

Skin and Body Protection
Rubber or PVC gloves.

Respiratory Protection
NIOSH-approved respiratory protection for organic gases if needed.

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, transparent liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless, transparent</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>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>101 °C / 214 °F</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>10 °C / 50 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>8.2%</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>1.7%</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>40 mm HG</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>3.45</td>
<td>(Air=1)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.944</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Not determined</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>Auto-ignition Temperature</td>
<td>Not determined</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
None under normal processing.

Hazardous Polymerization
Hazardous polymerization may occur, especially when heated or catalyzed.

Conditions to Avoid

Incompatible Materials
Polymerization catalysts such as peroxides, persulfates, light, heat, nitric acid and other strong oxidizers, ammonia and amines, and halogens and halogen compounds.

Hazardous Decomposition Products
Thermal-oxidative degradation can produce toxic and corrosive materials, including carbon monoxide.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact  Causes serious eye irritation.

Skin Contact  Causes skin irritation. May cause an allergic skin reaction.

Inhalation  May cause respiratory irritation. May be harmful if inhaled.

Ingestion  Do not ingest.

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 80-62-6</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>
<tr>
<td>Polymerizable Methacrylates</td>
<td>= 1600 mg/kg (Rat)</td>
<td>-</td>
<td>-</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  Group 3 IARC components are “not classifiable as human carcinogens”.

<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 80-62-6</td>
<td></td>
<td>Group 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend

* IARC (International Agency for Research on Cancer)
  Group 3 IARC components are “not classifiable as human carcinogens”

STOT - single exposure  May cause respiratory irritation.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.
Component Information

<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 80-62-6</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 Oncorhyncus mykiss mg/L LC50 flow-through 79: 96 h Oncorhyncus mykiss mg/L LC50 static 326.4 - 426.9: 96 h Poecilia reticulata mg/L LC50 static</td>
<td>69: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>Polymerizable Methacrylates</td>
<td>84.3: 96 h Pimephales promelas mg/L LC50 flow-through 28.5: 96 h Oncorhyncus mykiss mg/L LC50 flow-through</td>
<td></td>
<td></td>
<td>EC50 = 3.66 mg/L 5 min EC50 = 4.30 mg/L 15 min EC50 = 4.61 mg/L 30 min</td>
</tr>
</tbody>
</table>

Persistence/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 80-62-6</td>
<td>0.7</td>
</tr>
<tr>
<td>Polymerizable Methacrylates</td>
<td>1.34</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.

US EPA Waste Number

<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 80-62-6</td>
<td>U162</td>
<td>Included in waste stream: F039</td>
<td></td>
<td>U162</td>
</tr>
</tbody>
</table>

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate 80-62-6</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**
- UN/ID No: UN1247
- Proper Shipping Name: Methyl methacrylate monomer, stabilized
- Hazard Class: 3
- Packing Group: II

**IATA**
- UN/ID No: UN1247
- Proper Shipping Name: Methyl methacrylate monomer, stabilized
- Hazard Class: 3
- Packing Group: II

**IMDG**
- UN/ID No: UN1247
- Proper Shipping Name: Methyl methacrylate monomer, stabilized
- Hazard Class: 3
- Packing Group: II
- Marine Pollutant: This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>Present</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**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
- AICS - Australian Inventory of 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 80-62-6</td>
<td>1000 lb</td>
<td></td>
<td>RQ 1000 lb final RQ 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 - 80-62-6</td>
<td>80-62-6</td>
<td>Proprietary</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Chemical Name</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</td>
<td>1000 lb</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
# US State Regulations

## California Proposition 65
This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know 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 80-62-6</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Polymerizable Methacrylates</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>2</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

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

Issue Date: 21-Feb-2013  
Revision Date: 13-Jan-2015  
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