MATERIAL SAFETY DATA SHEET

Product Identity:

ZAP - ACRYLIC (Powder)

SECTION I. Identification

Manufacturer
Dental Ventures of America Inc.
1787 Pomona Rd, Suite C
Corona, CA. 92880

Emergency Telephone Number:
Infotrack (800) 535 - 5053

Product Information Number:
(951) 270 - 0606

ORIGINATED: OCT.2012

SECTION II. Composition/Information on Ingredients

Classification of the substance or mixture
This substance is classified as non-hazardous according to GHS Regulation EC1272/2008

Label elements

Signal word
None

Hazard Statement
None

Precautionary Statement
(Prevention) P281
Use personal protective equipment as required

(Response) P312
Call a POISON CENTER or doctor/physician if you feel unwell
P330
Rinse mouth

(Disposal) P501
Dispose of contents/container in accordance with local regulation

Hazardous components
None

for labelling

In Accordance with Directive 67/548/EC or Directive 1999/45/EC

Labelling in accordance
None

Hazard Symbols
None

Risk-Phrases
None

Safety-Phrases
S9 Keep container in a well-ventilated place
S33 Take precautionary measures against static discharges
S36 Wear suitable protective clothing

SECTION III. Hazardous Ingredients/Identify Information

In Accordance with Regulation EC 1272/2008

COMPONENT CAS NO. CONTENT HAZARD/CATEGORY/STATEMENT
Poly Methyl Methacrylate 9011-14-7 >97% -

In Accordance with Directive 67/548/EC or Directive 1999/45/EC

COMPONENT CAS NO. HAZARD SYMBOL - R-PHRASE CONTENT
Poly Methyl Methacrylate 9011-14-7 - >97%
Dental Ventures of America, Inc.

Product:  ZAP - ACRYLIC (Powder)

SECTION IV. First Aid Measures

General advice  No special measures required.
Inhalation  This product is not a respiratory irritant.
Skin contact  This product is not skin irritating.
Eye contact  Flush with plenty of water. Consult a doctor if irritation occurs.
Ingestion  Drink plenty of water. Induce vomiting and consult a doctor.

Most important symptoms and effects, both acute and delayed.  None
Indication of any immediate medical attention and special treatment needed - No

SECTION V. Fire-Fighting Measures

Extinguishing media  Suitable extinguishing media  Water mist, extinguishing powder, carbon dioxide
Unsuitable extinguishing media  Do not use a direct water stream.
Special hazards arising from the substance or mixture  None
Advice for firefighters  Use water spray to cool unopened containers.

SECTION VI. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures  No special measures required. No dangerous materials are released.
Environmental procedures  No special measures required.
Methods and material for containment and cleaning up  Clean up mechanically.
Reference to other sections  For personal protection see section 8. For disposal considerations see section 13.

SECTION VII. Handling and Storage

Precautions for safe handling  Only adequately trained personnel should handle the product. Use hygienic measures for dental practice.
Conditions of safe storage, including any incompatibilities  Store in a cool, dry area.

SECTION VIII. Exposure Controls / Personal Protection

Control parameters  Substance contains no components or products of decomposition according to point 10, with limit values related to the place of work, which require monitoring. However, manufacturer recommends:
Poly Methyl Methacrylate  CAS No. 9011-14-7  WEL 10mg/m3

Exposure protective measures  Usual precautionary measures should be employed when handling the material.
Personal Protective Equipment  Hygiene measures Use hygienic measures for dental practice.
Respiratory protection  If workplace exposure limit is exceeded (leakage, spillage), apply dust mask with P2 particle filter.
Hand protection  In practice, as the product is a preparation of several substances, resistance tests of glove materials cannot be conducted in advance and should be performed by the end user prior to application. A suitable glove type should be selected for each work environment. On the whole, for permanent contact in work areas, natural latex (NR) gloves are suitable.
Eye protection  Not required, but safety goggles are recommended.
Body protection  On handling larger quantities: light weight protective clothing.
SECTION IX. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Powder</td>
</tr>
<tr>
<td>Melting Temperature</td>
<td>n/a</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>n/a</td>
</tr>
<tr>
<td>Upper Explosion Limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not soluble</td>
</tr>
<tr>
<td>pH value</td>
<td>n/a</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>Boiling Temperature</td>
<td>n/a</td>
</tr>
<tr>
<td>Ignition Temperature</td>
<td>&gt;400 °C</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>n/a</td>
</tr>
<tr>
<td>Solubility (Qualitative)</td>
<td>Soluble in organic solvents</td>
</tr>
<tr>
<td>Partition Co-efficient</td>
<td>n/a</td>
</tr>
<tr>
<td>Viscosity (Dynamic)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>n/a</td>
</tr>
<tr>
<td>Ignition Temperature</td>
<td>&gt;400 °C</td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>20g/m³</td>
</tr>
<tr>
<td>Relative Density</td>
<td>n/a</td>
</tr>
</tbody>
</table>

This product is not self-igniting or explosive, however formation of explosive powder/air mixtures is possible.

SECTION X. Stability and Reactivity

Reactivity
Avoid contact with other chemicals.

Chemical stability
Stable under normal temperature conditions and when used as directed. Decomposition can occur at elevated temperatures (>250°C), releasing potentially irritating vapours (methyl methacrylate).

Possibility of hazardous reactions
No hazardous reactions known when used as directed.

Conditions to avoid
The product is supplied in a stable form. Protect from humidity.

Incompatible materials
None known.

Hazardous decomposition products
Organic products of decomposition. No decomposition occurs when used as directed.

SECTION XI. Toxicological Information

Metabolism -

- **Acute Oral Toxicity**: LD50 rat (PMMA) >10000mg/kg
- **Acute Inhalation Toxicity**: not toxic
- **Acute Dermal Toxicity**: not toxic
- **Caustic Burning/Skin Irritation**: No irritant effect
- **Serious Eye Damage/Irritation**: No irritant effect
- **Respiratory/Skin Sensitisation**: None known
- **Germ Cell Mutagenicity**: Non mutagenic
- **Carcinogenicity**: Non carcinogenic
- **Reprotoxicity/Teratogenicity**: not toxic

General Information
Product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations. When used and handled according to specifications and GLP, no harmful effects are observed.

SECTION XII. Ecological Information

Ecotoxicity
None, insoluble in water (inert polymer).

Aquatic Environment
None

Persistence and Degradability
Product is solid, chemically inert and non-biodegradable. No negative effects are known.

Biodegradability
Bioaccumulation No evidence for hazardous properties

Mobility in soil
Mobility The substance not water soluble. No evidence for hazardous properties

Bioaccumulative potential
Persistent, Bioaccumulative or Toxic n/a

Mobility in soil
n/a

Results of PBT and vPvB assessment
Very Persistent, very Bioaccumulative

n/a
### SECTION XIII. Disposal Considerations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Waste is non-hazardous and can be disposed of in an incineration plant or approved landfill in accordance to local regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>Can be re-used or recycled after cleaning.</td>
</tr>
<tr>
<td>List of Waste, LOW</td>
<td>07 Wastes from organic chemicals, 07 02 Waste from the MFSU (manufacture, formulation, supply and use) of plastics, synthetic rubber and man-made fibres, 07 02 13 Waste plastic, acrylate co-polymers.</td>
</tr>
</tbody>
</table>

Always check the given waste code according to the actual conditions of manufacturing, formulation or use in your facility.

### SECTION XIV. Transportation Information

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>Land Transport ADR/GGVSEB -</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land Transport RID/GGVSEB -</td>
</tr>
<tr>
<td></td>
<td>Inland Waterway Transport ADNR/GGVSEB -</td>
</tr>
<tr>
<td></td>
<td>Shipment by Sea IMDG/GGVSee - Marine pollutant No</td>
</tr>
<tr>
<td></td>
<td>Air Transport ICAO/IATA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>Product not classified as hazardous for transport.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group</td>
<td>None</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Refer to section , not applicable if unmentioned</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Refer to section 14.2</td>
</tr>
<tr>
<td>Transport in bulk according to the IBC code</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### SECTION XV. Regulatory Information

<table>
<thead>
<tr>
<th>Safety, health and environmental regulations/legislation specific for the substance or mixture</th>
<th>Product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Legislation</td>
<td>Labelling in accordance with GefStoffV/EC The product is not subject to identification regulations under EC Directives and The Ordinance on Hazardous Materials</td>
</tr>
<tr>
<td>Chemical safety assessment</td>
<td>H-statements from Section 3 None</td>
</tr>
<tr>
<td>Hazard symbols</td>
<td>None</td>
</tr>
<tr>
<td>R-phrases from Section 3</td>
<td>None</td>
</tr>
</tbody>
</table>

### SECTION XVI. Other

The substance is supplied in a stabilized form. These data are based on our current knowledge and experience, however do not constitute a guarantee for any specific product feature. The instructions given here are valid only for the substance as supplied, not for derivatives resulting from its use.

The data herein relates to the product named and is based upon information that Dental Ventures of America, Inc. believes to be reliable and accurate. No warranty expressed or implied is intended. Users of this product have the responsibility to determine the suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. This information is offered solely for your consideration and interpretation.