SAFETY DATA SHEET
ACRYLIC-PLASTER SEPARATOR (APS)

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT DESCRIPTION: Acrylic-Plaster Separator (APS)

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

USE OR APPLICATION: Separator for plaster and resin.

USES ADVISED AGAINST: Do not use for purposes other than those listed.

2. HAZARD(S) IDENTIFICATION

GHS CLASSIFICATIONS
The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in Section 3, it requires a safety data sheet with appropriate information, compliant to EC Regulation 1907/2006 and subsequent amendments.

REGULATION 1272/2008 AND FOLLOWING AMENDMENTS AND ADJUSTMENTS.

DESCRIPTION OF ANY HAZARDS NOT OTHERWISE CLASSIFIED
On the basis of available data, the product does not contain any PBT or vPvB in percentages greater than 0.1%.

3. COMPOSITION /INFORMATION ON INGREDIENTS

SUBSTANCES or MIXTURE Liquid emulsion

NO. COMPONENT Identification. Conc. %. Classification 67/548/EEC. Classification 1272/2008 CLP.
BORAX
cas. 1303-96-4 1 - 1.5 R epr. Cat. 2 R60, Repr. Cat. 2 R61 Repr. 1B H360FD
EC. 215-540-4
INDEX. 005-011-01-1

Note: Upper limit is not included into the range.
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)
4. FIRST-AID MEASURES

Description of first aid measures.

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

**Most important symptoms and effects, both acute and delayed.**
For symptoms and effects caused by the contained substances, see Section 11.

**Indication of any immediate medical attention and special treatment needed.**
Information not available.

5. FIRE-FIGHTING MEASURES

Extinguishing media.

**SUITABLE EXTINGUISHING EQUIPMENT**
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT**
None in particular.

**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**
Do not breathe combustion products.

**Advice for firefighters.**
**GENERAL INFORMATION**
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Specific end use(s).

Information not available.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Regulatory References:

<table>
<thead>
<tr>
<th>Country</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRB</td>
<td>EH40/2005 Workplace exposure limits</td>
</tr>
<tr>
<td>IRL</td>
<td>Code of Practice Chemical Agent Regulations 2011</td>
</tr>
<tr>
<td>TLV-ACGIH</td>
<td>ACGIH 2014</td>
</tr>
</tbody>
</table>

BORAX

<table>
<thead>
<tr>
<th>Type</th>
<th>Country</th>
<th>TWA/8h (mg/m³ ppm)</th>
<th>STEL/15min (g/m³ ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
<td>GRB</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>OEL</td>
<td>IRL</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>TLV-ACGIH</td>
<td>2</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Legend:
(C) = CEILING;  INHAL = Inhalable Fraction;  RESP = Respirable Fraction;  THORA = Thoracic Fraction.

Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves’ resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves’ wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.
SAFETY DATA SHEET
ACRYLIC-PLASTER SEPARATOR (APS), Pg. 5

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type B filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Imperceptible</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>8.5 – 9.5</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower inflammability limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper inflammability limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosive limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosive limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>200 – 800 mPa/s R2 20 rpm</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
There are no particular risks of reaction with other substances in normal conditions of use.

Chemical stability.
The product is stable in normal conditions of use and storage.

Possibility of hazardous reactions.
No hazardous reactions are foreseeable in normal conditions of use and storage.
BORAX: risk of explosion on contact with: strong oxidising agents, acids, moisture/water, metal salts.

Conditions to avoid.
None in particular. However the usual precautions used for chemical products should be respected.
BORAX: Keep away from strong reducing agents to avoid the development of hydrogen, which is explosive.

Incompatible materials.
Information not available.

Hazardous decomposition products.
BORAX: boron oxides, sodium oxides.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects.
In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

BORAX
LD50 (Oral).2660 mg/kg Rat
LD50 (Dermal).10000 mg/kg Rabbit

12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.
Toxicity.
Information not available.

Persistence and degradability.
BORAX
Solubility in water. 47000 mg/l

Bioaccumulative potential.
BORAX
Partition coefficient: n-octanol/water. -1.53

Mobility in soil.
Information not available.

Results of PBT and vPvB assessment.
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

Other adverse effects.
Information not available.

13. DISPOSAL CONSIDERATIONS

Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. TRANSPORT INFORMATION

UN number.
Not applicable.

UN proper shipping name.
Not applicable.

Transport hazard class(es).
Not applicable.

Packing group.
Not applicable.

Environmental hazards.
Not applicable.

Special precautions for user.
Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.
Information not relevant.
15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture.

Seveso category.
None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Contained substance.
Point. 30
BORAX

Substances in Candidate List (Art. 59 REACH).
BORAX

Substances subject to authorisation (Annex XIV REACH).
None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None.

Substances subject to the Rotterdam Convention:
None.

Substances subject to the Stockholm Convention:
None.

Healthcare controls.
Information not available.

Chemical safety assessment.
No chemical safety assessment has been processed for the mixture and the substances it contains.

16. OTHER INFORMATION

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Repr. 1B Reproductive toxicity, category 1B
H360FD May damage fertility. Suspected of damaging the unborn child. Text of risk (R) phrases mentioned in section 2-3 of the sheet:
Repr. Cat. 2 Reproductive toxicity, fertility, category 2.
R60 MAY IMPAIR FERTILITY.
Repr. Cat. 2 Reproductive toxicity, development, category 2.
R61 MAY CAUSE HARM TO THE UNBORN CHILD.
SAFETY DATA SHEET
ACRYLIC-PLASTER
SEPARATOR (APS), Pg. 9

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).
GENERAL BIBLIOGRAPHY
1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
8. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- ECHA website

DATE PREPARED: November 2011
SUPERSEDES MSDS: June 2015

MANUFACTURER DISCLAIMER:
To the best of our knowledge, the information contained herein is accurate. However, Dental Ventures of America, Inc does not assume any liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.