SAFETY DATA SHEET
TOKUSO CERAMIC PRIMER A

1. IDENTIFICATION

Product Name
TOKUSO CERAMIC PRIMER A

Identified uses
Dental Cement, a component of kit. For dental professionals only.

Supplier
Tokuyama Dental America Inc.
Tel: (877) 378 3548 (Toll-Free)
Contact Person http://www.tokuyama-dental.com/contact.htm

Manufacturer
Tokuyama Dental Corporation
38-9, Taitou 1-chome, Taitou-ku, Tokyo
110-0016, Japan
TEL: +81-3-3835-2261

Emergency Telephone
Washington
National Capital Poison Center
3201 New Mexico Avenue, Suite 310
Washington, DC 20016
Telephone: +1 202 362 3867
Emergency telephone: +1 800 222 1222
Fax: +1 202 362 8377
E-mail: pc@poison.org
Web site: http://www.poison.org

San Francisco
California Poison Control System
at San Francisco General Hospital
University of California San Francisco, Box 1369
1001 Potrero Avenue, Bldg 5 Rm 2A21
San Francisco, California 94143-1369
Telephone: +1 415 643 3200
Emergency telephone: +1 800 222 1222
Fax: +1 415 502 6010
E-mail: coadmin@calpoison.org
Web site: http://www.calpoison.org

http://www.who.int/ipcs/poisons/centre/en/

2. HAZARD(S) IDENTIFICATION

Appearance
Liquid

Color
Colourless.

Odor
Slight odor, Characteristic.

GHS Pictogram

Signal Word
Danger

Hazard Statements
H225 Highly flammable liquid and vapour.

Precautionary Statements
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P233 Keep container tightly closed.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P403+235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local regulations.

GHS Classification
Physical and Chemical Hazards Flam. Liq. 2 - H225
TOKUSO CERAMIC PRIMER A

Human health  Not classified.
Environment  Not classified.

Hazard Not Otherwise Classified (HNOC)  
Not applicable.

OSHA Regulatory Status  
This Product is Hazardous under the OSHA Hazard Communication Standard.

General Information  
May cause irritation to the respiratory system. IF SWALLOWED: Irritating. (DIGESTIVE SYSTEM.) This chemical may cause skin/eye irritation. Product has a defatting effect on skin. Prolonged skin contact may cause redness, irritation and dry skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>80-100%</td>
</tr>
<tr>
<td>CAS No.: 64-17-5 EC No.: 200-578-6</td>
<td></td>
</tr>
<tr>
<td>GHS Classification</td>
<td></td>
</tr>
<tr>
<td>Flam. Liq. 2 - H225</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>γ-methacryloxypropyl trimethoxy silane</td>
<td>1-5%</td>
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<tr>
<td>CAS No.: 2530-85-0 EC No.: 219-785-8</td>
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</tr>
<tr>
<td>GHS Classification</td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; STOT SE 3 - H335</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Description of first aid measures

General Information  
Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation  
Move the exposed person to fresh air at once.

Ingestion  
Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention if any discomfort continues.

Skin Contact  
Wash the skin immediately with soap and water.

Eye Contact  
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

Most important symptoms and effects, both acute and delayed

Inhalation  
Irritating to respiratory system.

Ingestion  
Irritating. (DIGESTIVE SYSTEM.)

Skin Contact  
Irritating. Product has a defatting effect on skin. Prolonged contact may cause redness and irritation.

Eye Contact  
Irritating and may cause redness and pain.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician  
CAUTION! First aid personnel must be aware of own risk during rescue! Wear suitable protective clothing.
5. FIRE-FIGHTING MEASURES

Auto Ignition Temperature (°C) 423℃
Flammability Limit - Lower(%) 3.3
Flammability Limit - Upper(%) 19
Flash point (°C) 14℃

Extinguishing Media
Fire can be extinguished using: Foam. Carbon dioxide or dry powder.

Specific Hazards
When heated and in case of fire, irritating vapors/gases may be formed.

Special Fire Fighting Procedures
Avoid breathing fire vapors.

Protective Equipment For Fire-Fighters
Wear full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions
Do not allow to enter drains, sewers or watercourses.

Spill Clean Up Methods
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections
For personal protection, see section 8.

7. HANDLING AND STORAGE

Handling
All handling to take place in well-ventilated area.

Storage
Store in a cool, dark place (0-25°C, 32-77°F). Keep away from heat, direct sunlight, sparks and open flames.

Storage Class
Flammable liquid storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>ACGIH</td>
<td>1000 ppm</td>
<td>1900 mg/m3</td>
<td>A3</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>PEL</td>
<td>1000 ppm</td>
<td>1900 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>3300 ppm</td>
</tr>
</tbody>
</table>

ACGIH=American Conference of Governmental Industrial Hygienists.
A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

Protective Equipment

Engineering Measures
Provide adequate general and local exhaust ventilation.
TOKUSO CERAMIC PRIMER A

Respiratory Equipment
In case of inadequate ventilation use suitable respirator.

Hand Protection
Wear protective gloves.

Eye Protection
Wear approved safety goggles.

Other Protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

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>Color</td>
<td>Colourless.</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor. , Characteristic.</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>78°C</td>
</tr>
<tr>
<td>Melting point (°C)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
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<tr>
<td>Vapor density (air=1)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH-Value, Conc. Solution</td>
<td>&lt; 7</td>
</tr>
<tr>
<td>pH-Value, Diluted Solution</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature (°C)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour Threshold, Lower</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odour Threshold, Upper</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>14°C</td>
</tr>
<tr>
<td>Auto Ignition Temperature (°C)</td>
<td>423°C</td>
</tr>
<tr>
<td>Flammability Limit - Lower(%)</td>
<td>3.3</td>
</tr>
<tr>
<td>Flammability Limit - Upper(%)</td>
<td>19</td>
</tr>
<tr>
<td>Partition Coefficient (N-Octanol/Water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Flammability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No information available.
TOKUSO CERAMIC PRIMER A

Stability
HIGHLY FLAMMABLE!
Hazardous reactions:
Not available.

Conditions To Avoid
Keep away from heat, sparks and open flame. Protect against direct sunlight.

Materials To Avoid

Hazardous Decomposition Products
Toxic gases are generated when heated.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:
Not available.

Skin Corrosion/Irritation:
Irritating. Product has a defatting effect on skin. Prolonged skin contact may cause redness and irritation.

Serious eye damage/irritation:
Irritating and may cause redness and pain.

Respiratory or skin sensitisation:
Respiratory sensitisation
Not available.
Skin sensitisation
Not available.

Germ cell mutagenicity:
Not available.

Carcinogenicity:
IARC Carcinogenicity
Ethanol in alcoholic beverages : IARC Group 1 Carcinogenic to humans.
NTP - Carcinogenicity
Not listed.
OSHA - Carcinogenicity
Not listed.

Reproductive Toxicity:
Not available.

Specific target organ toxicity - single exposure:
Irritating to respiratory system.

Specific target organ toxicity - repeated exposure:
STOT - Repeated exposure
Not available.

Aspiration hazard:
Viscosity
Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
No data on possible environmental effects have been found.
Toxicity
No data available.
TOKUSO CERAMIC PRIMER A

Degradability
No data available.

Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient
Not available.

Mobility:
No information available.

Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB Substances.

Other adverse effects
Not known.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

| UN No. (DOT/TDG) | 1133 |
| UN No. (IMDG)    | 1133 |
| UN No. (ICAO)   | 1133 |

DOT Proper Shipping Name
ADHESIVES, CONTAINING A FLAMMABLE LIQUID

TDG Proper Shipping Name
ADHESIVES, CONTAINING A FLAMMABLE LIQUID

DOT Hazard Class
3

DOT Hazard Label
Flammable Liquid

TDG Class
3

TDG Label(s)
3

IMDG Class
3

ICAO Class
3

Transport Labels

DOT Pack Group
II

IMDG Pack Group
II

Air Pack Group
II

Environmentally Hazardous Substance/Marine Pollutant
No.

EMS
F-E, S-D

Special precautions for user
Not available.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes
Not applicable.

15. REGULATORY INFORMATION
TOKUSO CERAMIC PRIMER A

Regulatory Status (US)
This Product is Hazardous under the OSHA Hazard Communication Standard.

Regulatory References

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.
CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed.
SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed.
SARA 313 Emission Reporting
None of the ingredients are listed.
CAA Accidental Release Prevention
None of the ingredients are listed.
SARA (311/312) Hazard Categories
Fire
OSHA Highly Hazardous Chemicals
None of the ingredients are listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed.
California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed.
California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed.
Massachusetts "Right To Know" List
The following ingredients are listed.
ETHANOL
Rhode Island "Right To Know" List
The following ingredients are listed.
ETHANOL
Minnesota "Right To Know" List
The following ingredients are listed.
ETHANOL
New Jersey "Right To Know" List
The following ingredients are listed.
ETHANOL
Pennsylvania "Right To Know" List
The following ingredients are listed.
ETHANOL

International Inventories
EU - EINECS/ELINCS
All ingredients are listed or exempt.
Canada – DSL/NDSL
All ingredients are listed or exempt.
US - TSCA
All ingredients are listed or exempt.
US – TSCA 12(b) Export Notification
None of the ingredients are listed.

16. OTHER INFORMATION

Revision Comments
This is first issue.

Revision Date 08/05/2014
TOKUSO CERAMIC PRIMER A

Disclaimer

The information which is contained in this document is based on available data. However, as such has been obtained from various sources, including independent laboratories, it is given without warranty or representation that is complete, accurate and can be relied upon. Tokuyama Dental Corp. has not attempted to conceal in any way the deleterious aspects of the product listed herein, but makes no warranty as to such.