SECTION 1. Identification of the substance or mixture and of the supplier

1.1 Product identifier
Trade Name: M.L. PRIMER

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Dental material
Uses advised against: No further data

1.3 Details of the supplier of the safety data sheet
Company/Undertaking identification
Manufacturer's Name: SHOFU INC.
Address: 11 Kamitakamatsu-cho, Fukuine, Higashiyama-ku, Kyoto 605-0983, JAPAN
Phone: +81-75-561-1112
Fax: +81-75-275-4795
Section in Charge: Quality Assurance Section

1.4 Emergency Telephone Number
+81-75-561-1112

SECTION 2. Hazards identification

2.1 GHS Classification
PHYSICAL HAZARDS
FLAMMABLE LIQUIDS Category 2

HEALTH HAZARDS
SKIN CORROSION/IRRITATION Category 2
EYE DAMAGE/IRRITATION Category 2A
SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE) Category 3 (narcotic effects)

The thing without mention is out of a classification object. Or cannot classify it.

2.2 Label elements
SYMBOL

GHS02 GHS07

SIGNAL WORD Danger

HAZARD STATEMENTS
Highly flammable liquid and vapor
Causes skin irritation
Causes serious eye irritation
May cause drowsiness and dizziness
PRECAUTIONARY STATEMENTS

[Prevention]
Do not handle until all safety precautions have been read and understood.
Wear protective gloves and eye/face protection.
Do not breathe mist/vapors.
Keep away from ignition sources such as heat/sparks/open flames-No smoking.
Use only outdoors or in a well-ventilated area.
Keep container tightly closed.
Wash hands thoroughly after handling.

[Response]
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
If skin irritation occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Get medical advice/attention if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

[Storage]
Store container tightly closed in cool/well-ventilated place.

[Disposal]
Dispose of contents and container in accordance with regulation.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3. Composition/information on ingredients

3.1 Chemical characterization: Mixtures
3.2 Description: Mixture of substances listed below with nonhazardous additions.
3.3 Dangerous components:
   Acetone [Cas.No.67-64-1] 99-99.5 %
   Other component:
      Phosphonate monomer
      Others
3.4 Additional information: For the wording of the listed risk phrases refer to section 2

SECTION 4. First-aid measures

4.1 Description of first aid measures
   Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present.
               and easy to do. If eye irritation persists, get medical advice/attention.
   Skin contact: Wash immediately with soap and plenty of water. If on skin, skin irritation, get medical advice/attention.
   Ingestion: Rinse mouth and seek medical advice if necessary.
   Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If symptom concerning breath goes out, call a POISON CENTER or doctor.

4.2 Most important symptoms and effects, both acute and delayed
   No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
   No further relevant information available.

SECTION 5. Fire-fighting measures

5.1 Extinguishing Media:
   Foam, CO₂, Powder, Dry sand

5.2 Special hazards arising from the substance or mixture:
   Easily flammable liquid in room temp.
   Fire may produce irritating, corrosive and/or toxic gases.

5.3 Advice for firefighters:
   Wear fire protective cloth and self-contained breathing apparatus, if necessary.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
   Avoid contact with eyes and skin.

6.2 Environmental Precautions:
   Send to approved treatment/disposal company or dispose according to local, state and federal regulations.

6.3 Methods and material for containment and cleaning Up:
   Wipe up and discard in a stable container.

6.4 Reference to other section:
   See Section 7 for information on safe handling.
   See Section 8 for information on personal protection equipment.
   See Section 13 for disposal information.

SECTION 7. Handling and storage

7.1 Precautions for safe handling:
   Handle in a well ventilated place.
   Keep away from open flames, sparks and sources of heat. No smoking.

7.2 Conditions for safe storage, including any incompatibilities:
   Store in a cool and dark area with container tightly closed.
   Separated from strong oxidants. (Keep refrigerated when not in use.)

7.3 Specific end use(s):
   No further relevant information available.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters:

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA-Final PELs</th>
</tr>
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<tbody>
<tr>
<td>Acetone</td>
<td>500 ppm TWA</td>
<td>250 ppm TWA (590mg/m³ TWA)</td>
<td>1000 ppm TWA 2400 mg/m³ TWA</td>
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<tr>
<td></td>
<td>750 ppm STEL</td>
<td>2500 ppm IDLH</td>
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</tr>
</tbody>
</table>
8.2 Exposure controls:

Respiratory Protection: Not required (use protective gas mask for organic gas, if necessary)

Skin Protection: Hand Protection

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
  - Material of gloves
    - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - Penetration time of glove material
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
    - Butyl rubber, BR
    - Nitrile rubber, NBR

Eye Protection: Safety goggles

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance/Odor/Colour: Colorless liquid with sweet odor
- Odour threshold: Not determined.
- pH: Not determined.
- Melting point/freezing point: Not determined.
- Boiling Point: 57 ºC (as Acetone)
- Flash point: -18 ºC (closed)
- Evaporation rate: Not determined.
- Flammability (solid, gas): Not applicable.
- Upper/lower flammability or explosive limits: Not determined.
- Vapour pressure: Not determined.
- Vapour density: Not determined.
- Relative Density: 0.8 (water=1)
- Solubility: water solubility Soluble
- Partition coefficient: n-octanol/water: Not determined.
- Auto-ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Viscosity: Not determined.
- Explosive properties: Not applicable.
Oxidising properties

Not applicable.

9.2 Other information

No further relevant information available.

SECTION 10. Stability and reactivity

10.1 Reactivity:
No further relevant information available.

10.2 Chemical stability:
Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions:
No dangerous reactions known.

10.4 Condition to Avoid:
Excessive heat (high temperature), open flames, ignition source, and exposure to sunlight.

10.5 Incompatible materials:
Strong oxidizing materials.

10.6 Hazardous Decomposition Products:
None under normal conditions of storage and use.

SECTION 11. Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:
- Acetone: Oral rat LD50 > 5800 mg/kg
- Dermal rabbit LD50 > 7400 mg/kg
- Inhalation rat LC50 32000 ppm/4H (75.8 mg/L)

Skin corrosion/irritation: Skin Irrit. 2; H315 Causes skin irritation.
Eye damage/irritation: Eye Irrit. 2A; H319 Causes serious eye irritation.
Sensitization to the respiratory tract: Based on available data, the classification criteria are not met.
Skin sensitization: Based on available data, the classification criteria are not met.
Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): STOT SE 3; H336 May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

SECTION 12. Ecological information

12.1 Toxicity:
Acetone:
  Fish toxicity: Fathead minnow; LC50/96H >100mg/L

12.2 Persistence and degradability:
No further relevant information available.
12.3 Bioaccumulative potential:
No further relevant information available.
12.4 Mobility in soil:
No further relevant information available.
12.5 Results of PBT and vPvB assessment:
Not applicable.
12.6 Other adverse effects:
No further relevant information available.

SECTION 13. Disposal considerations
13.1 Waste treatment methods:
Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14. Transport information
14.1 UN number: 1090
14.2 UN proper shipping name: Acetone, solution
14.3 Transport hazard class(es): 3 Flammable liquids.
14.4 Packing group: II
14.5 Environmental hazards: No further relevant information available.
14.6 Special precautions for user: Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

SECTION 15. Regulatory information
Follow all regulations in your country.

SECTION 16. Other information
This product is intended for use by dental professionals. (instrument/material)

NFPA ratings for USA (scale 0-4)
Acetone;

Health = 1
Fire = 3
Reactivity = 0

Relevant HMIS-Ratings (Scale 0-4)
Acetone;

Health Hazard 1
Fire Hazard 3
Reactivity 0

Relevant phrases:
H225 Highly flammable liquid and vapour.
H315  Causes skin irritation.
H319  Causes serious eye irritation.
H336  May cause drowsiness or dizziness.

Abbreviations and acronyms:
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative