MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name: BGA Stencil Cleaner.
Chemical Family: A blended compound of demineralized water and modified alcohols.
Packaged By: Micro Care Corp., 595 John Downey Drive, New Britain, CT., USA   CAGE/FSCM: OATV9
Emergency Telephone: CHEMTREC (800) 424-9300

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Material</th>
<th>Weight Range</th>
<th>TLV Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demineralized Water</td>
<td>80.0-99.0</td>
<td>None Assigned</td>
</tr>
<tr>
<td>2-Amino-2-methyl-propanol</td>
<td>&lt; 0.5</td>
<td>None Assigned</td>
</tr>
</tbody>
</table>

All components of this material are listed on the TSCA inventory.

3. Hazard Identification

Emergency Overview: Not Flammable. Colorless liquid with a mild odor. Liquid will irritate eyes and skin under repeated or prolonged exposure. Keep away from children.

Potential Health Effects:

- **Eyes**: Vapor contact: Mild irritant. Liquid contact: Will irritate eyes with possible corneal injury. Persons wearing contact lenses should wear chemical protective safety glasses when exposed to this product.
- **Skin**: Moderate irritant. For prolonged contact: dry/chapped skin.
- **Ingestion**: Can cause depression of central nervous system, nausea, stomach cramps, vomiting, diarrhea.
- **Inhalation**: At low concentration levels: may cause mild irritation to nose and throat. At high levels: headache, drowsiness and lassitude, loss of appetite, inability to concentrate.
- **Medical Conditions Aggravated by Exposure**: Preexisting disease of the skin and eyes.

4. First Aid Measures

- **Eyes**: Immediately flush with water. Remove any contact lenses and continue flushing for 15 minutes, lifting eyelids occasionally until no evidence of the chemical remains. If irritation develops or persists call a physician.
- **Skin**: Wash promptly with soap and water. Remove and wash contaminated clothing and shoes before reuse.
- **Ingestion**: Do not induce vomiting. Do not give stimulants. Call a physician.
- **Inhalation**: Remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do not give Epinephrine. Call a physician.
- **Note to Attending Physician**: There is no specific antidote to overexposure. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Immediate medical attention for acute overexposure is required.

5. Firefighting Measures

Flash Point: None to boiling.

Flammable Limits in Air: Lower Explosion Limit (LEL): Not Determined; Upper Explosion Limit (UEL): Not Determined

Extinguishing Media: Not Flammable.

Special Firefighting Procedures: Evacuate personnel. Wear self contained breathing apparatus (SCBA) and full protective equipment. Keep containers cool. Containers are not pressurized with propellant, however, excessive heating may generate pressure within a closed container causing violent bursting and dangerous propelling of container.

6. Accidental Release Measures

Spill or Leak: Evacuate area, absorb spilled liquid with commercial, nonflammable absorbent i.e. sand, vermiculite. Remove unprotected personnel. Protected personnel should remove ignition sources and shut off fire sources. Provide ventilation. Shovel (spark proof) absorbent material into drums and close. Do not flush to sewer.

7. Handling and Storage

Avoid breathing vapors or mist. Use only with adequate ventilation. Avoid repeated or prolonged contact with eyes, skin or clothing. Wash thoroughly after handling. Do not store in direct sunlight. Store in cool dry place, away from heat.

8. Exposure Controls/Personal Protection

Eye Protection: Use chemical protective safety glasses.

Protective Clothing: Where there is potential for skin contact, use appropriate impervious gloves, apron, pants and jacket.

Exposure Guidelines: None established for this product.

NFPA, NPCA-HIMIS RATING:

- Health: 0
- Flammability: 0
- Reactivity: 0

Personal Protection rating to be supplied by user depending on use conditions.

9. Physical and Chemical Properties

- Physical Form: Clear colorless liquid
- Odor: Mild aromatic
- Boiling Point: 97° C / 208° F
- pH (10 g/l): 10.0
- Solubility in Water: Complete
- % Volatile by Weight: 100
- Density: 0.99 g/cm3
- Viscosity: ca. 1.6 cSt
- Vapor Pressure: 31.38 mbar
- Vapor Density (air=1): >1
10. Reactivity

**Chemical Stability:** Material is stable.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Avoid concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, acetyl chloride, halogens and halogen compounds.

** Decomposition Products:** None.

11. Toxicological Information

**Toxicity:**

2-Amino-2-methyl-propanol
LD 50 (oral rat) >2,000 mg/kg.

**Carcinogenicity:** None of the components present in BGA Stencil Cleaner are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. Ecological Information

This material is not expected to be toxic to aquatic life.

13. Disposal Considerations

**Waste Disposal:** Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

14. Transportation Information

**Transport for BGA Stencil Cleaner**

**Ground Transport:**
Liquid Cleaning Compound N.O.S., Not Hazardous, Not Regulated

**Air Transport:**
Liquid Cleaning Compound N.O.S., Not Hazardous, Not Regulated

15. Regulatory Information

**Section 313 Supplier Information:** This material contains the following toxic chemicals subject to the emergency reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and 40 CFR 372:

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This information must be included in all MSDSs that are copied and distributed for this material.

**Title III Hazard Communications Sections 311, 312**

- Acute: No
- Chronic: No
- Fire: No
- Reactivity: No

16. Other Information

For additional information, contact Tech Support at Micro Care:
Telephone (860) 827-0626 or email: techsupport@microcare.com