Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 30601 POLYETHER ADHESIVE - 17 ML BOTTLE (NA)
MANUFACTURER: 3M
DIVISION: 3M ESPE Dental Products
ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 03/02/11
Supercedes Date: 04/09/10
Document Group: 16-4015-0

Product Use:
Intended Use: Dental Product
Limitations on Use: For use only by dental professionals.
Specific Use: Used in impressioning systems.

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE</td>
<td>141-78-6</td>
<td>25 - 50</td>
</tr>
<tr>
<td>HEPTANE</td>
<td>142-82-5</td>
<td>25 - 35</td>
</tr>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>5 - 15</td>
</tr>
<tr>
<td>METHYLCYCLOHEXANE</td>
<td>108-87-2</td>
<td>5 - 10</td>
</tr>
<tr>
<td>FORMALDEHYDE, POLYMER WITH 1,3-BENZENEDIOL AND 4-(1,1-DIMETHYLETHYL)PHENOL</td>
<td>59633-97-5</td>
<td>0 - 5</td>
</tr>
<tr>
<td>POLYCHLOROPRENE</td>
<td>9010-98-4</td>
<td>0 - 5</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Liquid
Odor, Color, Grade: Blue in color, characteristic solvent odor.
General Physical Form: Liquid

~Verified on 2014-04 by Henry Schein to be the most current version of the SDS. To be verified again on 2017-04. ~
Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause target organ effects. This document has been prepared in accordance with the U.S. OSHA Hazard Communication Standard, which requires the inclusion of all known hazards of the product or ingredients regardless of the potential risk. The risks of the hazards communicated in this document may vary depending on the potential for exposure.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:
Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:
Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Ingestion:
Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:
Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.
If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>30 °F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits(LEL)</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits(UEL)</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill.Contain spill. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with detergent and water. Seal the container.
In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
Avoid eye contact. Contents may be under pressure, open carefully. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid skin contact.

7.2 STORAGE
Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSOAL PROTECTION

8.1 ENGINEERING CONTROLS
Use in an enclosed process area is recommended. Use in a well-ventilated area. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection
Avoid skin contact.

8.2.3 Respiratory Protection
Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing
Not applicable. Do not ingest.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE</td>
<td>ACGIH</td>
<td>TWA</td>
<td>500 ppm</td>
<td></td>
</tr>
<tr>
<td>ACETONE</td>
<td>ACGIH</td>
<td>STEL</td>
<td>750 ppm</td>
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</tr>
<tr>
<td>ACETONE</td>
<td>OSHA</td>
<td>TWA</td>
<td>2400 mg/m3</td>
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<tr>
<td>ETHYL ACETATE</td>
<td>ACGIH</td>
<td>TWA</td>
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<tr>
<td>ETHYL ACETATE</td>
<td>OSHA</td>
<td>TWA</td>
<td>1400 mg/m3</td>
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</tr>
<tr>
<td>HEPTANE</td>
<td>OSHA</td>
<td>TWA</td>
<td>2000 mg/m3</td>
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<tr>
<td>Heptane, all isomers</td>
<td>ACGIH</td>
<td>TWA</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td>Heptane, all isomers</td>
<td>ACGIH</td>
<td>STEL</td>
<td>500 ppm</td>
<td></td>
</tr>
<tr>
<td>METHYL CYCLOHEXANE</td>
<td>ACGIH</td>
<td>TWA</td>
<td>400 ppm</td>
<td></td>
</tr>
</tbody>
</table>
METHYLCYCLOHEXANE OSHA TWA 2000 mg/m3

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Physical Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor, Color, Grade:</td>
<td>Blue in color, characteristic solvent odor.</td>
</tr>
<tr>
<td>General Physical Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>30 °F [Test Method: Closed Cup]</td>
</tr>
<tr>
<td>Flammable Limits(LEL)</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flammable Limits(UEL)</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Boiling Point</td>
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<tr>
<td>Density</td>
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<tr>
<td>Vapor Density</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
<td>180 mmHg</td>
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<tr>
<td>Specific Gravity</td>
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</tr>
<tr>
<td>pH</td>
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<tr>
<td>Melting point</td>
<td>No Data Available</td>
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<tr>
<td>Solubility in Water</td>
<td>Moderate</td>
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<td>Evaporation rate</td>
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<tr>
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<tr>
<td>Percent volatile</td>
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</tr>
<tr>
<td>VOC Less H2O &amp; Exempt Solvents</td>
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</tr>
<tr>
<td>Viscosity</td>
<td>40000 centipoise</td>
</tr>
</tbody>
</table>

### SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:
10.1 Conditions to avoid
Heat
Sparks and/or flames

10.2 Materials to avoid
None known

Hazardous Polymerization: Hazardous polymerization will not occur.
Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Irritant Vapors or Gases</td>
<td>During Combustion</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

ID Number(s):
70-2011-0648-4, 70-2011-0895-1, 70-2011-0997-5

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
Contact 3M for more information.
311/312 Hazard Categories:
Fire Hazard - Yes  Pressure Hazard - No  Reactivity Hazard - No  Immediate Hazard - Yes  Delayed Hazard - No

This material contains a chemical which requires export notification under TSCA Section 12[b]:

<table>
<thead>
<tr>
<th>Ingredient (Category if applicable)</th>
<th>C.A.S. No</th>
<th>Regulation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEPTANE (Heptane)</td>
<td>142-82-5</td>
<td>Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals</td>
<td>Applicable</td>
</tr>
<tr>
<td>HEPTANE</td>
<td>142-82-5</td>
<td>Toxic Substances Control Act (TSCA) 4 Test Rule Chemicals</td>
<td>Applicable</td>
</tr>
</tbody>
</table>

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
This material contains one or more substances not listed on the TSCA Inventory. Commercial use of this material is regulated by the FDA.

Contact 3M for more information.

INTERNATIONAL REGULATIONS
Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification
Health: 1  Flammability: 3  Reactivity: 0  Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.
Revision Changes:
Copyright was modified.
Section 3: Potential effects from inhalation information was modified.
Section 3: Potential effects from ingestion information was modified.
Section 14: Transportation legal text was modified.
Section 9: Boiling point information was modified.
Section 5: Flammable limits (UE) information was modified.
Section 5: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 2: Ingredient table was modified.
Section 8: Exposure guidelines ingredient information was modified.
Section 15: TSCA section 12[b] information was modified.
Section 6: Methods for cleaning up information was modified.
Section 3: Immediate other hazard(s) was added.
Section 6: 6.2. Environmental precautions heading was added.
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
Section 6: Clean-up methods heading was added.
Section 6: Release measures heading was deleted.

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