Material Safety Data Sheet

1. PRODUCT IDENTIFICATION
Product Name: 81668 STRIPPED THREAD REPAIR  PART 1
Item No: 390220D
Product Type: Adhesive

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Percent</th>
<th>ACGIH 8 Hr. TWA:</th>
<th>OSHA 8 Hr. TWA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AROMATIC DIMETHACRYLATE ESTER</td>
<td>40-60</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ALUMINIUM POWDER</td>
<td>30-40</td>
<td>10 mg/m³ TWA (metal dust)</td>
<td>15 mg/m³ TWA (total dust), 5 mg/m³ TWA (respirable)</td>
</tr>
<tr>
<td>AMORPHOUS SILICA</td>
<td>1-10</td>
<td>10 mg/m³ TWA</td>
<td>6 mg/m³ TWA</td>
</tr>
<tr>
<td>ACRYLIC ACID</td>
<td>1-10</td>
<td>2 ppm TWA; 5.9 mg/m³ TWA</td>
<td>10 ppm TWA; 30 mg/m³ TWA</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Toxicity: Note: This product does not contain microcrystalline silica. May cause eye, skin and respiratory irritation. Oral LD50 greater than 5000 mg/kg. Dermal toxicity greater than 2000 mg/kg.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.

Signs and Symptoms of Exposure: Repeated skin contact may cause allergic skin reactions. May cause redness to eyes and irritation to nasal passages.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Percent</th>
<th>NTP:</th>
<th>ACGIH Carcinogens</th>
<th>IARC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA</td>
<td>1-10</td>
<td></td>
<td></td>
<td>Group 3 Monograph 68, 1997</td>
</tr>
<tr>
<td>ACRYLIC ACID</td>
<td>1-10</td>
<td></td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
<td></td>
</tr>
</tbody>
</table>

Medical Conditions Recognized as Being Aggravated by Exposure: Acrylic acid: Upper respiratory and lung diseases, dermatitis.

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes If skin irritation persists, call a physician

Eye Contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/°C): More than 200 degrees F. Method: Tag Closed Cup
Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.
Hazardous Products Formed by Fire or Thermal Decomposition: If ignited, burns with unusual evolution. In a fire, reaction with water is possible.

| Lower Explosive Limit: | 2.0% Acrylic acid; 30.0 Aluminum metal |
| Upper Explosive Limit: | 8.0% Acrylic acid |
6. ACCIDENTAL RELEASE MEASURES
Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE
Storage: Store below 100 degrees F.
Handling: Do not inhale vapors. Avoid prolonged skin contact. Keep away from eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Eyes: Safety glasses.
Skin: Rubber or plastic gloves
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product.
Respiratory Protection: An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Gray liquid
Odor: MILD
Boiling Point (°F): More than 300 degrees F.
pH: Does not apply
Solubility in Water: Slight
Specific Gravity: 1.39
VOC Content(Wt.%): <10% by weight
Vapor Pressure: Less than 5 mm Hg @ 80F.
Vapor Density (Air=1): Not Determined
Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY
Chemical Stability: Stable at normal conditions
Hazardous Polymerization: WILL NOT OCCUR
Incompatibilities: Oxidizing agents. Metal salts, heat and amines.
Conditions to Avoid: Heat
Hazardous Products Formed by Fire or Thermal Decomposition: Irritating vapors. Oxides of nitrogen, Oxides of carbon.

11. TOXICOLOGICAL INFORMATION
See Section 3

12. ECOLOGICAL INFORMATION
No data available

13. DISPOSAL CONSIDERATIONS
Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION
DOT (49CFR 172)
Domestic Ground Transport
DOT Shipping Name: Unrestricted
Hazard Class: NONE
UN/ID Number: None
Marine Pollutant: None

IATA
Proper Shipping Name: Not regulated
Class or Division: None
UN/NA Number: None
Product name: 81668 STRIPPED THREAD REPAIR

PART 1

IMDG
Proper Shipping: Unrestricted
Hazard Class: None
UN Number: None

15. REGULATORY INFORMATION
SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

SARA 313 Information
ACRYLIC ACID

CALIFORNIA PROP 65:
No California Prop 65 chemicals are known to be present.

TSCA Inventory Status:
Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION
Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 1, REACTIVITY 1
Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0
NFPA is a registered trademark of the National Fire Protection Assn.
HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Health and Safety Manager
Company: Permatex Inc. 10 Columbus Blvd. Hartford, CT USA 06106
Telephone Number: 1-87-Permatex (877) 376-2839

Revision Date: 03/25/2005
Revision Number: 7
Material Safety Data Sheet

1. PRODUCT IDENTIFICATION
Product Name: 81668 STRIPPED THREAD REPAIR PART 2
Item No: 390222D
Product Type: Activator

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Percent</th>
<th>ACGIH 8 Hr. TWA:</th>
<th>OSHA 8 Hr. TWA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AROMATIC DIMETHACRYLATE ESTER</td>
<td>50-65</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ALUMINIUM POWDER 7429-90-5</td>
<td>30-40</td>
<td>10 mg/m³ TWA (metal dust) ACGIH</td>
<td>15 mg/m³ TWA (total dust), 5 mg/m³ TWA (respirable)</td>
</tr>
<tr>
<td>AMORPHOUS SILICA 7631-86-9</td>
<td>1-10</td>
<td>10 mg/m³ TWA</td>
<td>6 mg/m³ TWA</td>
</tr>
<tr>
<td>COPPER NAPHTHENATE 1338-02-9</td>
<td>0.1-0.5</td>
<td>0.2 mg/m³ as Cu, fume; 1 mg/m³ as Cu, dust</td>
<td>0.1 mg/m³ as Cu, fume; 1 mg/m³ as Cu, dust</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION
Toxicity: Note: This product does not contain microcrystalline silica. May cause eye, skin and respiratory irritation. Dermal toxicity greater than 2000 mg/kg. Oral LD50 (rat) for this product is greater than 5000 mg/kg.
Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.
Signs and Symptoms of Exposure: Repeated skin contact may cause allergic skin reactions. May cause redness to eyes and irritation to nasal passages.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Percent</th>
<th>NTP:</th>
<th>ACGIH Carcinogens</th>
<th>IARC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMORPHOUS SILICA</td>
<td>1-10</td>
<td></td>
<td></td>
<td>Group 3 Monograph 68, 1997</td>
</tr>
</tbody>
</table>

Medical Conditions Recognized as Being Aggravated by Exposure: Preexisting pulmonary and dermatological disorders

4. FIRST AID MEASURES
Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation: Move to fresh air in case of accidental inhalation of vapors. Oxygen or artificial respiration if needed.
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES
Flash Point (°F/C): More than 200 degrees F. Method: Tag Closed Cup
Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.
Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.
Hazardous Products Formed by Fire or Thermal Decomposition: Irritating vapors. Oxides of nitrogen, Oxides of carbon.
Unusual Fire/Explosion Hazards: If ignited, burns with unusual evolution. In a fire, reaction with water is possible.

Lower Explosive Limit: 30.0 Aluminum metal
Upper Explosive Limit: Not determined
6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store below 100 degrees F.
Handling: Do not inhale vapors. Avoid prolonged skin contact. Keep away from eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.
Skin: Rubber or plastic gloves
Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits during the use of this product.
Respiratory Protection: An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue-grey liquid
Odor: MILD
Boiling Point (°F): More than 300 degrees F.
Solubility in Water: Slight
Specific Gravity: 1.37
VOC Content(Wt.%): <5% by weight
Vapor Pressure: Less than 5 mm Hg @ 80F.
Vapor Density (Air=1): Not Determined
Evaporation Rate: Not Determined

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions
Hazardous Polymerization: WILL NOT OCCUR
Incompatibilities: Strong oxidizers. Metal salts, heat and amines.
Conditions to Avoid: Heat
Hazardous Products Formed by Fire or Thermal Decomposition: Irritating vapors. Oxides of nitrogen, Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.
US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

Domestic Ground Transport
- DOT Shipping Name: Unrestricted
- Hazard Class: NONE
- UN/ID Number: None
- Marine Pollutant: None

IATA
- Proper Shipping Name: Not regulated
- Class or Division: None
- UN/NA Number: None
**15. REGULATORY INFORMATION**

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

SARA 313 Information
NONE

CALIFORNIA PROP 65:
No California Prop 65 chemicals are known to be present.

TSCA Inventory Status:
Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

**16. OTHER INFORMATION**

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 1, REACTIVITY 1
Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 1, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Health and Safety Manager
Company: Permatex, Inc. 10 Columbus Blvd. Hartford, CT USA 06106
Telephone Number: 1-877-Permatex (877) 376-2839

Revision Date: 03/25/2005
Revision Number: 6
Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 81668P FORM-A-THREAD STRIPPED THREAD REPAIR PART 3
Item No: 390505D
Product Type: Release agent

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Percent</th>
<th>ACGIH 8 Hr. TWA:</th>
<th>OSHA 8 Hr. TWA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>85-95</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>7732-18-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBSTITUTED SILICONE</td>
<td>1-10</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>67923-07-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLYDIMETHYLSILOXANE</td>
<td>1-10</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>83148-62-9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Toxicity: Note: This product does not contain microcrystalline silica. May cause eye and skin irritation.
Primary Routes of Entry: Eye and skin contact, ingestion, inhalation.
Signs and Symptoms of Exposure: Overexposure may cause eye and skin redness.
Medical Conditions Recognized as Being Aggravated by Exposure: None known

4. FIRST AID MEASURES

Ingestion: If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.
Inhalation: None reasonably foreseeable.
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): None
Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.
Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus.
Hazardous Products Formed by Fire or Thermal Decomposition: Formaldehyde. Irritating vapors.
Unusual Fire/Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store below 100 degrees F. Do not allow freezing.
Handling: Avoid prolonged skin contact. Keep away from eyes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.
Skin: Rubber or plastic gloves
Ventilation: General ventilation is usually adequate.
Respiratory Protection: Not required under normal use.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Blue liquid</td>
</tr>
<tr>
<td>Odor:</td>
<td>NONE</td>
</tr>
<tr>
<td>Boiling Point (°F):</td>
<td>212 degrees F.</td>
</tr>
<tr>
<td>pH:</td>
<td>9-11</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>SOLUBLE</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.0</td>
</tr>
<tr>
<td>VOC Content (Wt.%):</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>17 mm Hg</td>
</tr>
<tr>
<td>Vapor Density (Air=1):</td>
<td>0.6</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Slower than ether</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

- Chemical Stability: Stable at normal conditions
- Hazardous Polymerization: WILL NOT OCCUR
- Incompatibilities: None known
- Conditions to Avoid: Heat
- Hazardous Products Formed by Fire or Thermal Decomposition: Formaldehyde Irritating vapors.

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations.

US EPA Waste Number: NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Shipping Name:</td>
<td>Unrestricted</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>NONE</td>
</tr>
<tr>
<td>UN/ID Number:</td>
<td>None</td>
</tr>
<tr>
<td>Marine Pollutant:</td>
<td>None</td>
</tr>
</tbody>
</table>

IATA

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name:</td>
<td>Not regulated</td>
</tr>
<tr>
<td>Class or Division:</td>
<td>None</td>
</tr>
<tr>
<td>UN/NA Number:</td>
<td>None</td>
</tr>
</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping:</td>
<td>Unrestricted</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td>None</td>
</tr>
<tr>
<td>UN Number:</td>
<td>None</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

SARA 313 Information
NONE

CALIFORNIA PROP 65:
No California Prop 65 chemicals are known to be present.

TSCA Inventory Status:
Listed on Inventory: YES All components of this product are listed (or exempt) on the EPA TSCA inventory.
16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 1, FLAMMABILITY 0, REACTIVITY 0
Estimated HMIS Classification: HEALTH 1, FLAMMABILITY 0, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.
HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Denise Boyd, Health and Safety Manager
Company: Permatex. Inc. 10 Columbus Blvd. Hartford, CT USA 06106
Telephone Number: 1-877-Permatex (877) 376-2839

Revision Date: 03/25/2005
Revision Number: 4