1. Chemical Product and Company Identification

DESCRIPTION: PROBOND CONTACT CEMENT
PRODUCT TYPE: SYNTHETIC RUBBER SOLUTION
APPLICATION: 69501, 69503, 69504

2. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

% by weight
50-00-0
*Formaldehyde 78-93-3 *Methyl Ethyl Ketone 108-88-3 *Toluene
< 0.1 30-50 30-50
3. Hazards Identification

3.1 Emergency Overview

Appearance: Amber colored liquid
Odor: Solvent odor
DANGER!
EXTREMELY FLAMMABLE LIQUID AND VAPOR
May be harmful if inhaled. May cause irritation of nose, throat and lungs.
Can cause central nervous system depression.
Causes skin irritation.
Causes eye irritation.

• HMIS Rating

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>2</td>
<td>(moderate)</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>4</td>
<td>(severe)</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
<td>(minimal)</td>
</tr>
<tr>
<td>CHRONIC</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Potential Health Effects

• Immediate Hazards

INGESTION: Not expected to be harmful under normal conditions of use.
If accidentally swallowed, burns or irritation to mucous membranes, esophagus or GI tract can result.

INHALATION: May be harmful if inhaled. Liquid or vapor may cause irritation of nose, throat and lungs.
Can cause central nervous system depression.

SKIN: Causes irritation.
EYES: Causes irritation.

Methyl Ethyl Ketone 78-93-3
Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and asphyxiation. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may lead to addiction and may be harmful or fatal.

Toluene 108-88-3
Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and asphyxiation. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may lead to addiction and may be harmful or fatal.

Cyclohexane 110-82-7
Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.

Hydrotreated Light Naphtha (petroleum) 64742-49-0
Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting and drowsiness.

• **Delayed Hazards**

**Formaldehyde** 50-00-0
POTENTIAL CANCER HAZARD.
Rats chronically exposed to 14 ppm formaldehyde contracted nasal cancers. Based on animal data and limited epidemiological evidence, NTP and IARC have listed formaldehyde as a probable human carcinogen.
OSHA regulates formaldehyde as a potential human carcinogen. May cause allergic skin reaction. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory and skin disorders may be aggravated by exposure.
OSHA has identified 0.5 ppm as the "Action Level", 29CFR 1910.1048.
Please refer to the OSHA Standard for guidance applicable to your specific operations.

**Methyl Ethyl Ketone** 78-93-3
Suspect reproductive hazard. May cause reproductive disorders based on animal data.
Methyl ethyl ketone may potentiate (shorten the time of onset) peripheral neuropathy caused by methyl n-butyl ketone or n-hexane. Methyl ethyl ketone by itself has not been shown to cause peripheral...
neuropathy.  
-- See Footnote C.
Toluene 108-88-3
Suspect reproductive hazard. May cause reproductive disorders based on animal data.  
May cause spleen damage based on animal data.  
Can cause liver damage.  
Can cause kidney damage.  
May cause cardiac sensitization based on animal data.  
Prolonged and repeated exposures to high concentrations have resulted in hearing loss in laboratory animals.  
-- See Footnote C.
Cyclohexane 110-82-7
May cause lung damage based on animal data. Pre-existing respiratory disorders may be aggravated by exposure.  
May cause liver damage based on animal data.  
May cause kidney damage based on animal data.  
-- See Footnote C.
Hydrotreated Light Naphtha (petroleum) 64742-49-0
Chronic exposures may cause peripheral neuropathy.  
-- See Footnote C.
Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

4. First Aid Measures

**INGESTION:** If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

**INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

**SKIN:** Flush with plenty of water. Remove contaminated clothing. Call a physician if irritation persists.

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to insure water contact with entire surface of eyes and lids. Call a physician.

5. Fire Fighting Measures

Autoignition Temperature > 254 deg C
Upper/Lower Flammable Limits Not available
Up/Lower Explosive Limits, % by Vol Approx. 1.0/ approx. 11.5
Flash Point < -18 deg C
EXTREMELY FLAMMABLE LIQUID AND VAPOR.
Keep liquid and vapor away from heat, sparks, flame and other ignition sources including, but not limited to, pilot lights, heaters, cigarettes, electric motors and static discharge. Vapor is heavier than air and may settle in low places or travel outward to a source of ignition and flashback.
In case of fire, use dry chemical, "alcohol" foam or CO2; water may be ineffective, but should be used to keep fire-exposed containers cool.

6. Accidental Release Measures
Eliminate all ignition sources. Soak up with absorbent material and remove to a chemical disposal area. Prevent entry into natural bodies of water.

7. Handling and Storage

7.1 Handling
Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).
INHALATION: Avoid breathing vapor. Use with adequate ventilation.
SKIN: Avoid contact with skin and clothing.
EYES: Avoid contact with eyes.

7.2 Storage
Store in a cool, dry place.
Keep containers tightly closed.
Keep away from heat, sparks, flame and other ignition sources.
8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate.

If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Formaldehyde 50-00-0
ACGIH TLV: 0.3 ppm (0.37 mg/m³) Ceiling, A2 - See Appendix A
OSHA PEL: 0.75 ppm (0.9 mg/m³) TWA; 2 ppm (2.5 mg/m³) 15min STEL

Methyl Ethyl Ketone 78-93-3
ACGIH TLV: 200 ppm (590 mg/m³) TWA; 300 ppm (885 mg/m³) STEL
OSHA PEL: 200 ppm (590 mg/m³) TWA
REMANDED PEL: 200 ppm (590 mg/m³) TWA; 300 ppm (885 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states
Toluene 108-88-3
ACGIH TLV: Skin - 50 ppm (188 mg/m³) TWA
OSHA PEL: 200 ppm TWA; 300 ppm Ceiling; 500 ppm 10-min STEL
REMANDED PEL: 100 ppm (375 mg/m³) TWA; 150 ppm (560 mg/m³) STEL
OSHA 1989 PEL remanded, but in effect in some states
Cyclohexane 110-82-7
ACGIH TLV: 300 ppm (1030 mg/m³) TWA
OSHA PEL: 300 ppm (1050 mg/m³) TWA
Hydrotreated Light Naphtha (petroleum) 64742-49-0
ACGIH TLV: 50 ppm (180 mg/m³) TWA; 1000 ppm (3600 mg/m³) STEL
OSHA PEL: 500 ppm (1800 mg/m³) TWA, as Hexane
REMANDED PEL: 50 ppm (180 mg/m³) TWA, as Hexane
OSHA 1989 PEL remanded, but in effect in some states

9. Physical and Chemical Properties

Percent Volatiles 77
pH @ 25 C Not applicable
Specific Gravity 0.86
Appearance Amber colored liquid
Autoignition Temperature > 254 deg C
Boiling Point > 65 deg C
Vapor Density (Air=1) > 1
Vapor Pressure, mm Hg @ 20 C Not available
Evaporation Rate (Butyl Acetate=1) > 1
Upper/Lower Flammable Limits Not available
Up/Lower Explosive Limits, % by Vol Approx. 1.0/ approx. 11.5
Flash Point < -18 deg C
Freezing Point < 0 deg C
Odor Solvent odor
Odor Threshold, ppm 100 ppm
Solubility in Water Negligible
Coefficient of Water/Oil Distrib. Not available

10. Stability and Reactivity

Normally stable as defined in NFPA 704-12(4-3.1).

- **Conditions to Avoid:**

  Keep away from combustibles, ignition sources and oxidizers.

- **Incompatibilities:**

  Oxidizers, acids or bases.
• **Decomposition products may include:**

CO, CO2.

• **Hazardous polymerization:**

Will not occur.

• **Other Hazards:**

None known to company.

11. **Toxicological Information**

See Section 3 Hazards Identification information.

Formaldehyde 50-00-0
LC50: rat=203 mg/m³ (RTECS)
LD50: orl-rat=0.8 g/kg (Merck); skn-rbt=0.27 g/kg (Sax)
Methyl Ethyl Ketone 78-93-3
LC50: Not available
LD50: orl-rat=6.86 ml/kg (Merck)
Toluene 108-88-3
LC50: Not available
LD50: orl-rat=5000 mg/kg; skn-rbt=14 g/kg (Sax)
Cyclohexane 110-82-7
LC50: Not available
LD50: orl-rat=29.82 g/kg (Sax)
Hydrotreated Light Naphtha (petroleum) 64742-49-0
LC50: Not available
LD50: Not available

12. **Ecological Information**

Not determined.

13. **Disposal Considerations**

Recover free liquid. Absorb residue and dispose of according to local, state/provincial, and federal requirements.
Empty container: May contain explosive vapors. DO NOT cut, puncture
or weld on or nearby.

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation. Not determined.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Adhesives
Class 3 UN1133 Pk. Gr. II

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations


  This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

- SARA Title III: Section 311/312

  Fire hazard
  Immediate health hazard
Delayed health hazard

- **SARA Title III Section 313 and 40 CFR Part 372**

  This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Formula</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>MeK</td>
<td>78-93-3</td>
<td>30.00%</td>
</tr>
<tr>
<td>Toluene</td>
<td>C₆H₅CH₃</td>
<td>108-88-3</td>
<td>30.00%</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>C₆H₁₀</td>
<td>110-82-7</td>
<td>4.80%</td>
</tr>
</tbody>
</table>

- **TSCA Section 8(b) Inventory**

  All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

- **15.2 Canadian Regulations**

- **Workplace Hazardous Materials Information System (WHMIS)**

  This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

  - CLASS D, DIV 2B
  - CLASS B, DIV 2

- **Canadian Environmental Protection Act (CEPA)**

  All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.
• **National Pollutant Release Inventory (NPRI)**

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl ethyl ketone</td>
<td>78-93-3</td>
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<td>Toluene</td>
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<td>30.00%</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>110-82-7</td>
<td>4.80%</td>
</tr>
</tbody>
</table>

16. **Other Information**

• **User’s Responsibility**

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

• **Disclaimer**

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be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.