1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Component Bonder

Product Description: Component Bonder is a two part, non-UV Stable, reactive, structural 1:1 adhesive for secondary bonding in the countertop markets.

Company Identification: IPS Manufacturing Services, 4-33759 Morey Avenue, Abbotsford, BC, CANADA


2. COMPOSITION / INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Percent</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate</td>
<td>80-62-6</td>
<td>60 - 90%</td>
<td>TWA – 50 PPM</td>
<td>TWA – 50 PPM</td>
</tr>
<tr>
<td>Methacrylic Acid</td>
<td>79-41-4</td>
<td>3 - 15%</td>
<td>TWA – 20 PPM</td>
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</tr>
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</table>

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Non-hazardous PRODUCT when used as intended. NFPA Rating: Health - 2, Flammability - 3, Reactivity – 2, PPE – 2 NFPA Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme).

Potential Health Effects:

Routes of Entry: Skin contact, eye contact, inhalation, and ingestion.

Target Organs: Skin, eyes, respiratory and digestive system, and Central Nervous System (CNS).

Inhalation: Breathing vapors may cause irritation to the respiratory tract. Prolonged exposure may result in dizziness, nausea, headache, and anesthetic effects. May cause respiratory sensitization with asthma like symptoms in susceptible individuals.

Ingestion: Not expected route of entry. If ingested, it may cause irritation to the gastro-intestinal tract with symptoms including a burning sensation and abdominal pain. May act as CNS depressant.

Skin Contact: May cause skin irritation including itching, redness, rashes, burning and swelling. Allergic reactions are possible. Prolonged exposure may cause sensitization, rashes or burns.

Eye Contact: May cause eye irritation and/or sensitization including burning sensation, tearing, redness, and swelling. Overexposure may result in lacrimation, conjunctivitis, corneal damage, and permanent injury.

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air. If patient is having difficulty breathing, see immediate medical attention. If not breathing, clear airway and start mouth-to-mouth artificial respiration. Seek immediate medical attention.

Ingestion: Give patient 3 to 4 glasses of water. DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious person.

Skin Contact: Flush skin with water for at least 15 minutes, then wash affected areas with soap and water. Remove contaminated clothing.

Eye Contact: Flush eyes with water for 15 minutes. Remove contact lenses prior to water flush. Seek immediate medical attention on any exposure.

5. FIRE FIGHTING MEASURES

Flash Point: 51°F (11°C)  Auto-ignition temperature: 790°F (421°C)

Flash Point Method: TCC for Adhesive.

Flammable limits in air % by volume: LEL: 1.7% UEL: 12.5%

Burn Rate: Not Available.

Fire Extinguishing Media: In case of fire, use dry chemical, CO₂, or water spray to extinguish fire. Avoid water jet or stream due to frothing of product.

Special Fire Fighting Procedures: Use self-contained breathing apparatus with a full-face piece and pressure demand or other positive-pressure mode.

Special Remarks: This product can produce flammable vapors that may travel long distances to an ignition source and flash back. Sealed containers of adhesive may rupture explosively at elevated temperatures due to polymerization.

Hazardous Products of Combustion: Carbon Oxides (CO and CO₂), Methyl Methacrylate and various hydrocarbons.

6. ACCIDENTAL RELEASE MEASURES

Small Spill or Leak: Absorb with an inert material and place in an appropriate disposal container. Keep out of sewers and drains.

Large Spill or Leak: Wear self-contained breathing apparatus with appropriate PPE. Absorb with an inert material and place in an appropriate disposal container.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid breathing vapors. Use in a well-ventilated area. Wear rubber gloves (nitrile or butyl). Wear chemical splash goggles or safety glasses with side shields. Use a chemically resistant apron. Wash with soap and water after use.

STORAGE PRECAUTIONS: Store in a cool (<75°F (25°C)), dry, well-ventilated area. Keep container closed when not in use and away from heat sources, sparks, and open flames. Storage above 212°F (100°C) may cause explosive decomposition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide adequate ventilation. Ensure that a working eyewash and safety shower are in the work area.

Protective Equipment: Wear splash goggles or safety glasses with side shields, and neoprene or rubber gloves. Exposed skin should be covered to prevent contact with product. Use chemically resistant apron to minimize skin contact and clothing contamination. In case of insufficient ventilations, wear an approved (NIOSH) respirator with an organic vapor cartridge and dust/mist pre-filter. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

Hygiene Practices: Do not eat, drink or smoke when working with this material. Wash hands before and after work.

Exposure Guidelines/Other:

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</tbody>
</table>
9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Color Liquid Paste
Color: Varies, including clear
Physical State: Liquid
Odor: Mild/Sweet
pH: 4.0 to 6.0
Vapor Pressure: 28 mm Hg @ 68°F
Vapor Density: >1 (Air = 1)
VOC: < 50 gm/l mixed product

Boiling Point: 212°F (100°C)
Freezing Point/Melting Point: Not Available
Specific Gravity: .90 to 1.10 (Water = 1)
Solubility: Not Soluble in Water
Viscosity: 30,000 to 100,000 CPS
Evaporation Rate: 3 (butyl acetate = 1)
Percent Solids by Weight: Not Available

10. STABILITY AND REACTIVITY
Stability: Product is stable as supplied and when used as intended.
Hazardous Decomposition Products: Carbon Oxides (CO and CO2), Methyl Methacrylate and various hydrocarbons.
Hazardous Polymerization: Product may undergo polymerization. Avoid strong acids, bases, or free radical initiators.
Materials to Avoid (Incompatibility): Avoid oxidizers, reducing agents, acids, bases, free radical initiators (adhesive will polymerize and give off heat when exposed to free radicals), and combustible materials.
Conditions to Avoid: Avoid high temperatures, open flames, and sparks.

11. TOXICOLOGICAL INFORMATION
Acute Toxicity to Animals:
Methyl Methacrylate: LC50 = 7093 mg/m3 (4 hour, rat) Methacrylic Acid: LC50 = 7100 mg/kg (oral rat)
LD50 = 7940 mg/kg (oral, rat) LD50 > 7550 mg/kg (oral, rat)
LD50 < 1000 mg/kg (oral, mouse) LD50 = 1600 mg/kg (oral, mouse)
LD50 > 7550 mg/kg (dermal, rabbit) LD50 > 500 mg/kg (dermal, rabbit)

Chronic Toxicity to Animals: No additional information.
Chronic Effects on Humans: No additional information.
Mutagenic Effects: Classifiable None for human.
Developmental Toxicity: Classifiable None for human.
May Cause Damage to the Following Organs: No additional information.

12. ECOLOGICAL INFORMATION
Fish Toxicity: Methyl Methacrylate, 150 ppm 96 hour LC50 (flathead minnow), 232 ppm 96 hour LC50 (bluegill sunfish).
Ecotoxicity: No additional information.
BOD5 and COD: Not Available.
Biodegradable/OECD: Not Available.
Toxicity of the Products of Biodegradation: Not Available.
Special Remarks on the Products of Biodegradation: Not Available.

13. DISPOSAL CONSIDERATIONS
Hazardous waste product (RCRA 40 CFR 261) classified as D001. Spilled, contaminated, or waste material should be put into a suitable container and handled according to Federal, State, and local regulations. Contact a qualified waste management company for assistance.
Dispose of in accordance with federal, state and local requirements.

14. TRANSPORTATION INFORMATION
Proper Shipping Name: Adhesive, containing a flammable liquid. Hazard Class: 3 Identification Number: UN 1133
Packing Group: II Label Code: 3

15. REGULATORY INFORMATION
US Federal and State Regulations
All quantities in pounds

<table>
<thead>
<tr>
<th>Chemical (&amp; CAS No)</th>
<th>SARA 302 (EHS) TPQ</th>
<th>SARA 304 (EHS)Rq</th>
<th>SARA 313 de minimis</th>
<th>Cercla Rq</th>
<th>CAA 112(r) TQ</th>
<th>RCRA Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Methacrylate (80-62-6)</td>
<td></td>
<td></td>
<td>1.0</td>
<td>1,000</td>
<td>U162</td>
<td></td>
</tr>
<tr>
<td>Methacrylic Acid (71-41-3)</td>
<td>CA Prop 65</td>
<td>MA RTK</td>
<td>MN RTK</td>
<td>NJ RTK</td>
<td>PA RTK</td>
<td>RI RTK</td>
</tr>
</tbody>
</table>

DSL (Canada): The chemicals in this product are listed. EINECS: The chemicals in this product are listed. WHIMS: B2, C, and D2B.

16. OTHER INFORMATION
Prepared By: Louis J. Giovannini
Supersedes Date: New
Approval Date: August 10, 2017

This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-2004). The data contained in this Material Safety Data Sheet relates only to the specific product designated herein and does not relate in any way to use in combination with any other material(s), product or process. The information and statements contained herein are believed to be reliable but are not to be construed as a warranty or representation for which GlueBoss Adhesive Company LLC assumes legal responsibility. GlueBoss Adhesive Company LLC, MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREL, EXCLUDED ARE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Users should undertake verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein.

END OF MSDS DOCUMENT