SAFETY DATA SHEET

Forti-Lock™ SG Gray Liquid Flashing Resin
Forti-Lock™ WG Gray Liquid Flashing Resin

SECTION 1. PRODUCT & COMPANY INFORMATION

Product Name: Forti-Lock™ SG Gray Liquid Flashing Resin
Forti-Lock™ WG Gray Liquid Flashing Resin
Recommended Use: PMMA liquid membrane for roofing recovery

Manufacturer: SEAMAN CORPORATION
1000 Venture Blvd.
Wooster, OH 44691 USA
PHONE: (330) 262-1111
www.seamancorp.com

24-HR EMERGENCY (Chemtrec)
U.S./Canada: (800) 424-9300
International: +1 703 527-3887

SECTION 2. HAZARDS IDENTIFICATION

Pictograms:

Signal Word: DANGER

GHS Classification:
- Flammable Liquid – Category 2
- Skin Irritation – Category 2
- Skin Sensitization - Category 1
- Germ Cell Mutagenicity – Category 1 (WG ONLY)
- Carcinogenicity - Category 1B
- Toxic to Reproduction – Category 2
- Specific Target Organ Toxicity (Single Exposure) – Category 3 (Respiratory irritation)

Hazard Statements:
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects. (WG ONLY)
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H335 May cause respiratory irritation.

Prevention:
P201 Obtain special instructions before use.
Seaman Corporation Safety Data Sheet
Forti-Lock™ SG Gray Liquid Flashing Resin
Forti-Lock™ WG Gray Liquid Flashing Resin

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, and lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing vapors.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves, protective clothing, eye protection, and face protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical attention.
P312 Call a POISON CENTER or doctor if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical attention.
P333 + P313 If skin irritation or rash occurs: Get medical attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry chemical, CO2, or foam to extinguish.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P235 Keep cool.
P405 Store locked up.

Disposal:
P501 Dispose of contents and container in accordance with local, regional, and national regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate</td>
<td>80-62-6</td>
<td>10-25</td>
</tr>
<tr>
<td>2-Ethylhexyl acrylate</td>
<td>103-11-7</td>
<td>10-25</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>3-5</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free</td>
<td>112945-52-5</td>
<td>1-3</td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propen-1-yl)-ω-{[1-oxo-2-propen-1-yl]oxy}</td>
<td>26570-48-9</td>
<td>0.3-1</td>
</tr>
<tr>
<td>N-methyl-2-pyrrolidone</td>
<td>872-50-4</td>
<td>0.3-1</td>
</tr>
<tr>
<td>Cobalt bis(2-ethylhexanoate)</td>
<td>136-52-7</td>
<td>0.3-1</td>
</tr>
<tr>
<td>Stoddard solvent (WG ONLY)</td>
<td>8052-41-3</td>
<td>&lt;0.3</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Inhalation: Move to fresh air. Seek medical attention if symptoms persist.
Skin Contact: Wash exposed skin with soap and water. Do not use solvents or thinners. If irritation develops or persists, seek medical attention.
Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.
Ingestion: Seek medical attention. Do not induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES

Flammable Properties: Material is highly flammable. Likely to catch fire from nearby spark. Static charge may accumulate.
**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:**
Use personal protection recommended in Section 8.

**Environmental Precautions:**
No special procedures necessary

**Methods for Containment:**
No special procedures necessary

**Methods for Clean-up:**
No special procedures necessary

**SECTION 7. HANDLING AND STORAGE**

**Handling:**
Use protective equipment recommended in Section 8. Use only in well ventilated area. Eliminate any source of ignition. Ground and bond all equipment when handling. Any electrical equipment used around vapors should meet the applicable requirements of the local electrical code. Wash hands after contact.

**Storage:**
Keep away from oxidizing agents and strongly acid or strongly alkaline materials. Avoid heating or direct sunlight. Keep container closed until ready for use.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EXPOSURE GUIDELINES**

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA (PEL)</th>
<th>ACGIH (TLV)</th>
<th>NIOSH (REL)</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl methacrylate (80-62-6)</td>
<td>100 ppm (410 mg/m³) TWA</td>
<td>50 ppm (205 mg/m³) TWA; 100 ppm (410 mg/m³) STEL-C</td>
<td>100 ppm (410 mg/m³) TWA</td>
<td></td>
</tr>
<tr>
<td>2-Ethylhexyl acrylate (103-11-7)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>None established</td>
</tr>
<tr>
<td>Titanium Dioxide (13463-67-7)</td>
<td>15 mg/m³ TWA Total dust</td>
<td>10 mg/m³ TWA</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Silica, amorphous, fumed, cryst.-free (112945-52-5)</td>
<td>20 mppcf (80 mg/m³)%SiO₂</td>
<td>-</td>
<td>6 mg/m³ TWA; 3000 mg/m³ IDLH</td>
<td></td>
</tr>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α-(1-oxo-2-propen-1-yl)-ω-[1-oxo-2-propen-1-yl]oxy-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>None established</td>
</tr>
<tr>
<td>N-methyl-2-pyrrolidone (872-50-4)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>AIHA WEEL 10 ppm TWA</td>
</tr>
<tr>
<td>Cobalt bis(2-ethylhexanoate) (136-52-7)</td>
<td>-</td>
<td>0.02 mg/m³ TWA as Co</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Stoddard solvent (8052-41-3) (WG ONLY)</td>
<td>500 ppm (2900 mg/m³) TWA</td>
<td>100 ppm (525 mg/m³) TWA</td>
<td>350 mg/m³ TWA (10 h); CEIL 1800 mg/m³ (15 min)</td>
<td></td>
</tr>
</tbody>
</table>
PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Provide local exhaust ventilation
Eye/Face: Wear safety glasses
Skin: Wear chemical resistant protective gloves
Respiratory: If exposure limits are exceeded, NIOSH approved respiratory protection must be provided
General Hygiene: Wash hands with soap and water after handling material.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Strong solvent</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>2-22°C (35-72°F)</td>
</tr>
<tr>
<td>Flammability</td>
<td>Category 2</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.2</td>
</tr>
<tr>
<td>Partition Coefficient Kow</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temp.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>LFL/UFL</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Greater than air</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point (°C/°F)</td>
<td>2-22°C (35-72°F)</td>
</tr>
<tr>
<td>LFL (mg/L)</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>UFL (mg/L)</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Auto-Ignition Temp.</td>
<td>230°C (446°F)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2500-16000 cP</td>
</tr>
</tbody>
</table>

VOC Content: 2.4-4.2 g/L

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at recommended storage and handling conditions. Direct sun exposure or storage at temperatures above 60°C/140°F may produce uncontrolled and exothermic polymerization.
Conditions to Avoid: Sources of ignition
Incompatible Materials: Oxidizing agents, strong acids, strong bases
Hazardous Decomposition: Carbon monoxide, carbon dioxide
Hazardous Reactions: Will not occur

SECTION 11. TOXICOLOGY INFORMATION

POTENTIAL HEALTH EFFECTS:
Summary: Material is flammable, irritating to eyes and skin.
Inhalation: Irritation of the lungs
Skin Contact: Drying of skin and dermatitis may occur
Eye Contact: May cause irritation, redness, and burning; vapors may also cause irritation
Ingestion: Irritation of gastrointestinal tract
Target Organs: Respiratory tract, skin, eyes

ACUTE TOXICITY
General Information: In high concentration the material is irritating to the mucous membranes.
Component Analysis:
- Methyl methacrylate (80-62-6):
  Oral LD50 Rat: 7872 mg/kg
  Dermal LD50 Rabbit: >5000 mg/kg
  Inhalation (rat): 78000 mg/m³ (4-hr dose)
- 2-Ethylhexyl acrylate (103-11-7):
  Oral LD50 Rat: 6700 mg/kg
- Titanium Dioxide (13463-67-7):
  LD50 (oral, rat) > 5000 mg/kg
  LD50 (dermal, rabbit): no skin irritation
  Inhalation (rat): > 6.82 mg/L (4 hr)
- Silica, amorphous, fumed, cryst. free (112945-52-5):
  Oral LD50 Rat: 3160 mg/kg
- N-methyl-2-pyrrolidone (98-56-6):
Oral LD50 Rat: 3914 mg/kg  
Dermal LD50 Rabbit: >5000 mg/kg  
Cobalt bis(2-ethylhexanoate) (98-56-6):  
Oral LD50 Rat: 1220 mg/kg  
Dermal LD50 Rabbit: >5000 mg/kg

CARCINOGENICITY

General Information: This product is not classified as a carcinogen or potential carcinogen by OSHA, NTP, ACGIH, or IARC. No specific data available.

Component Analysis:  
Methyl methacrylate (80-62-6):  
IARC: 3 – Unclassifiable as to Carcinogenicity in Humans  
EPA: NL - Not Likely to be Carcinogenic to Humans  
ACGIH: A4 – Not Classifiable as a Human Carcinogen  
2-Ethylhexyl acrylate (103-11-7):  
IARC: 3 – Unclassifiable as to Carcinogenicity in Humans  
Titanium Dioxide (13463-67-7):  
IARC: Group 2B – Possibly carcinogenic to humans (Vol. 93, 2006)  
NTP: Potential occupational carcinogen  
ACGIH: A4 – Not Classifiable as a Human Carcinogen  
Silica, amorphous, fumed, cryst. free (112945-52-5):  
IARC: 3 – Unclassifiable as to Carcinogenicity in Humans  
Cobalt bis(2-ethylhexanoate) (136-52-7):  
IARC: Group 2B – Possibly carcinogenic to humans (Vol. 52, 1991)  
NTP: Reasonably anticipated to be a human carcinogen

CHRONIC TOXICITY

No data is available on mutagenicity, reproductive effects, or developmental effects.

SECTION 12. ECOLOGICAL INFORMATION

This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term effects in the aquatic environment.

Do not empty into drains or waterways.

TOXICITY

Methyl methacrylate: Acute LC50 130000 ug/L Fresh Water (Fish – Pimephales promelas, Adult – 96 h)  
Titanium dioxide: Acute LC50 >1000000 ug/L Marine Water (Fish – Fundulus heteroclitus – 96 h)

BIOACCUMULATIVE POTENTIAL

Methyl methacrylate: \( \log P_{ow} = 1.38 \)  
2-Ethylhexyl acrylate: \( \log P_{ow} = 4.64 \)  
N-methyl-2-pyrrolidone: \( \log P_{ow} = -0.46 \)  
Cobalt bis(2-ethylhexanoate): \( BCF = 15600 \)  
Stoddard solvent (WG ONLY): \( \log P_{ow} = 3.16 \) to 7.06

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with Federal, State, and local environmental control regulations. This material may be classified as hazardous under the Resource Conservation and Recovery Act. (40 CFR 261)

SECTION 14. TRANSPORTATION INFORMATION

This product is hazardous for transportation.  
Shipping Name: Paint  
Class: 3  Packing Group: II  ID No.: UN1263  ERG: 128
SECTION 15. REGULATORY INFORMATION

SARA Title III:  
Health:  Acute YES  Chronic YES  EHS NO  
Physical:  Fire YES  Reactivity NO  Pressure NO

SARA 313 (TRI):  This product contains the following chemicals subject to reporting under Superfund Amendments Reauthorization Act, Title III, Section 313 (Toxic Release Inventory):

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<th>Component</th>
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<td>10-25 %</td>
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<tr>
<td>Cobalt bis(2-ethylhexanoate) (136-52-7)</td>
<td>&lt;0.25%</td>
</tr>
</tbody>
</table>

California Proposition 65:  

WARNING:  This product can expose you chemicals including benzene and ethylbenzene, which are known to the State of California to cause cancer, and benzene, toluene, and N-methyl-2-pyrrolidone which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. No warranty of merchantability or any other warranty, expressed or implied, is given. In no case shall the information provided herein be considered a part of the terms and conditions of sale. Seaman Corporation assumes no obligation or liability for the information given or results obtained. All materials may present unknown hazards and should be used with caution. Final determination of suitability of any material is the sole responsibility of the user.

For questions related to the safety of this product, e-mail msds@seamancorp.com or call (330) 262-1111

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Forti-Lock™ is a trademark of Seaman Corporation

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Seaman Corporation  
Innovative Customer Solutions through Fiber and Polymer Technology  
1000 VENTURE BLVD. • WOOSTER, OHIO 44691  
PHONE: (330) 262-1111 • FAX: (330) 263-6950 • www.seamancorp.com