PRO PRIMER E RESIN - PART A

IDENTITY: Product Name: Pro Primer E Resin - Part A
SUPPLIER: Siplast
1000 Rochelle Blvd.
Irving, TX  75062
800-922-8800

Emergency Phone: CHEMTREC  800-424-9300

Recommended use of the chemical and restriction on use: Refer to the product technical data sheet. For industrial and professional users.

Section 2 – Hazards Identification

GHS Classification:
Skin irritation, Category 2 H315: Causes skin irritation.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.
Eye irritation, Category 2A H319: Causes serious eye irritation.
Harmful to aquatic life, Category 3 H411: Toxic to aquatic life with long lasting effects.

GHS Label element:

Hazard Pictograms

Signal Word: Warning

Hazard Statements:
H315: Causes skin irritation.
H317: May cause an allergic skin reaction
H319: Causes serious eye irritation.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:
P102: Keep out of reach of children.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear eye protection/face protection.
P280: Wear protective gloves.
P272: Contaminated work clothing should not be allowed out of the workplace.
P281: Use protective equipment as required.

Response:
P301 + P315: IF SWALLOWED: Get immediate medical advice/attention.
P302 + P352: IF ON SKIN: Wash with plenty of water.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313: IF skin irritation occurs, get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.

Storage:
P403 + P232: Store in a well-ventilated place. Protect from moisture.

Disposal:
P501: Dispose of contents/container to an approved waste disposal site.
P502: Refer to manufacturer/supplier for information on recovery/recycling.

Description: Solvent-free preparation based on bisphenol-A-epichlorhydrin resin molecular weight ≤700.

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>WEIGHT %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol-A-epichlorhydrin</td>
<td>25068-38-6</td>
<td>Not Estab.</td>
<td>Not Estab.</td>
<td>50-100%</td>
</tr>
<tr>
<td>1,6-bis(2,3-ethoxypropoxy)hexane</td>
<td>16096-31-4</td>
<td>Not Estab.</td>
<td>Not Estab.</td>
<td>10-25%</td>
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<tr>
<td>Diisopropynaphthalene</td>
<td>38640-62-9</td>
<td>Not Estab.</td>
<td>Not Estab.</td>
<td>10-25%</td>
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<tr>
<td>aliphatic trimethyl-propan triglydylether</td>
<td>30499-70-8</td>
<td>Not Estab.</td>
<td>Not Estab.</td>
<td>10-25%</td>
</tr>
<tr>
<td>bisphenol-F-epoxy resin</td>
<td>9003-36-5</td>
<td>Not Estab.</td>
<td>Not Estab.</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

Note: There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 3 – Composition / Information on Ingredients

Section 4 – First Aid Measures

After Inhalation: Remove subject to fresh air. Administer oxygen if difficulty with breathing. Consult a physician.

After Ingestion: Immediately seek medical attention. Do not induce vomiting. Drink plenty of water to dilute stomach contents.

After Skin Contact: Instantly wash skin with plenty of soap and water for at least 15 minutes. Wash clothing before reuse.

After Eye Contact: Rinse opened eye with plenty of running water for at least 15 minutes, lifting upper and lower eyelids occasionally. Remove contact lenses. Consult physician.

Section 5 – Fire Fighting Measures

Extinguishing Media: Carbon dioxide (CO₂), extinguishing powder, water fog. Do not use full water jet.

Special Fire Fighting Procedures: As in any fire, wear full protective gear and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards: Bursting and explosion of container possible due to increase of pressure when exposed to increasing heat. In case of fire, cool nearby containers with water fog. Formation of poisonous gases during heating or infires.
**Section 6 – Accidental Release Measures**

**Person-related Safety Precautions:** Provide plenty of fresh air. Avoid eye and skin contact. Avoid inhalation of vapors. Wear personal protective equipment. Remove or eliminate all ignition sources. Emergency procedures are not required.

**Methods for Cleaning up:** Contain and collect spillage with non-combustible, absorbent materials. i.e. sand, earth, vermiculate, diatomaceous earth, universal binders, sawdust and place in container for disposal.

**Waste Disposal Method:** Dispose in accordance with local, state and federal regulations.

**Ecological Information:** Do not allow product to reach ground water, bodies of water, or storm water or sewage systems.

**Section 7 – Handling and Storage**

**Handling:** Avoid eye and skin contact. Keep out of reach of children.

**Storage:** Store in a cool, dry enclosed area off the ground in tightly closed containers. No special measures required against explosion and fires. Store away from foodstuffs. Provide fresh air when handling in closed rooms (open windows and doors).

**Section 8 – Exposure Controls / Personal Protection**

**Engineering Controls:** Use with adequate general and local exhaust ventilation. Washing of the skin in the working area must be possible. Eye-wash station or bottle must be available.

**Respiratory Protection:** Respirator in well ventilated areas not necessary. Wear a properly fitted NIOSH approved respirator in poorly ventilated areas or spillage.

**Skin Protection:** When installing, wear appropriate protective rubber or plastic gloves to prevent hand-skin exposure. Wear appropriate impervious clothing to prevent skin exposure (long sleeve shirt and long pants).

**Eye Protection:** Wear tightly sealed safety glasses with side shields or goggles. Face shield as necessary.

**Work/Hygienic Practices:** Wash hands before breaks and after work, and before eating, drinking or smoking.

**Section 9 – Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance/Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Weak, characteristic</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not or slightly miscible</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;100°C (&gt;212°F)</td>
</tr>
<tr>
<td>Flammability</td>
<td>Does not self-ignite</td>
</tr>
<tr>
<td>Explosion</td>
<td>Does not explode</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1.12 kg/dm³ at 20°C (68°F)</td>
</tr>
<tr>
<td>Viscosity (dynamic)</td>
<td>495 cps (mPas) at 20°C (68°F)</td>
</tr>
<tr>
<td>VOC Concentration</td>
<td>0 g/l</td>
</tr>
</tbody>
</table>
PRO PRIMER E RESIN - PART A

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Keep away from heat, ignition sources and incompatible materials.

Hazardous Decomposition: Dangerous emissions of various decomposition products can be formed when exposed to heat.

Incompatibilities: Avoid contact with acids and oxidizers.

Section 11 – Toxicological Information

Acute Toxicity:
25068-38-6 bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) Oral
   LD50 >5000 mg/kg (rat)
Dermal LD50 >2000 mg/kg (rat)

16096-31-4 1,6-bis(2,3-ethoxypropoxy)hexane
   Oral LD50 1400 mg/kg (rabbit)
   LD50 2900 mg/kg (rat)
   Inhalative LC50/4 h >100 mg/l (mouse)

bisphenol F-epoxy resin
   Oral LD50 >5000 mg/kg (rat)

Primary Irritation:
- Skin: irritates skin and mucous membrane.
- Eyes: irritating
- Sensibility: sensibility through contact with skin possible.

Section 12 – Ecological Information

Aquatic toxicity:
25068-38-6 bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
   EC50 (24 h) 3.6 mg/l (Daphnia magna)
   LC50 (96 h) 1.5 mg/l (Rainbow trout)

9003-36-5 bisphenol F-epoxy resin
   EC50 2 mg/l (Daphnia (acute) toxicity)) LC50
       (96 h) 2 mg/l (Fish toxicity)

Persistence and degradability:
25068-38-6 bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
301B (Mod. Sturm) 12% (-)

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Remark: Toxic for fish. Do not allow product or large quantities to reach into waterways or drains.

General notes: Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, bodies of water, or storm water or sewage systems.
PRO PRIMER E RESIN - PART A

Section 13 – Disposal Considerations

Waste Disposal Method: Dispose of in a manner consistent with federal, state and local regulations. This includes pails containing uncured material. Pails with cured/hardened remains of product can be sent for recycling.

Recommendation: Product mixed with hardener and fully cured is ecologically save and can be disposed to local refuse deposit or recycling facility.

Section 14 – Transport Information

USDOT (Domestic Surface): UN 3082 Not regulated.

IATA/ICAO (Air): UN 3082 Environmentally hazardous substance, liquid, NOS (bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight<700), 1,6-Hexandioldiglycidylether. 9, PG III.

IMDG (Ocean): UN 3082 Environmentally hazardous substance, liquid, NOS (bisphenol A-(epichlorhydrin), epoxy resin (number average molecular weight<700), 1,6-Hexandioldiglycidylether. Marine pollutant. 9, PG III.

Section 15 – Regulatory Information

All raw materials are on the U.S., EPA, TSCA Inventory.

SARA Notification: Nothing in this product is subject to regulation under SARA 302, 313. It may be subject to SARA 312 reporting, depending upon the purchaser’s storage circumstances.

CERCLA: No CERCLA chemicals exist in this product above reportable concentrations.

Clean Air Act Ozone-Depletion Potential: This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section (40 CFR 61).

Section 16 – Other Information

(Hazard Rating: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe; * = Chronic)

HMIS III rating:
Health: 2* Flammability: 1 Physical hazard: 1

Abbreviations and acronyms:
USDOT: United States Department of Transportation.
IATA: International Air Transport Association.
CAS: Chemical Abstracts Service (Division of the American Chemical Society).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
EC50: Median effective concentration.
RQ: Reportable quantity.
PRO PRIMER E RESIN - PART A

Party responsible for the preparation of this SDS:  Todd Franks ussds@icopal.com.

DISCLAIMER:
We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

User is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. We recommend that user makes tests to determine the suitability of a product for its particular purpose prior to use.

END OF SDS
SAFETY DATA SHEET

PRO PRIMER E RESIN - PART B

Date prepared: JANUARY 2016

Section 1 – Identification

IDENTITY: Product Name: Pro Primer E Resin - Part B

SUPPLIER: Siplast
1000 Rochelle Blvd.
Irving, TX 75062

24 hr Emergency Phone: CHEMTREC (800) 424-9300

Recommended use of the chemical and restriction on use: Refer to the product technical data sheet. For industrial and professional users.

Section 2 – Hazards Identification

GHS Classification:
Acute toxicity, Category 4 (oral) H302: Harmful if swallowed.
Skin corrosion/irritation, Category 1B H314: Causes severe skin burns and eye damage.
Skin irritation, Category 2 H315: Causes skin irritation.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Harmful to aquatic life, Category 3 H371: Hazardous to the aquatic environment, acute hazard.
Reproductive toxicity, Category 2 H361: Suspected of damaging fertility or the unborn child.

GHS Label element:

Hazard Pictograms

GHS05  GHS07  GHS08

Signal Word: Danger

Hazard Statements:
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H361: Suspected of damaging fertility or the unborn child.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P102: Keep out of reach of children.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P272: Contaminated work clothing should not be allowed out of the workplace.
P281: Use protective equipment as required.
Response:
P301 + P315: IF SWALLOWED: Get immediate medical advice/attention.
P330 + P331: Rinse mouth. Do NOT induce vomiting.
P302 + P352 = P361: IF ON SKIN: Remove/Take off immediately all contaminated clothing. Wash with plenty of water.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313: IF exposed or concerned, get medical advice/attention.
P332 + P313: IF skin irritation occurs, get medical advice/attention.
P362: Take off contaminated clothing and wash before reuse.

Storage:
P403: Store in a well-ventilated place.
P405: Store locked up.

Disposal:
P501: Dispose of contents/container to an approved waste disposal site.
P502: Refer to manufacturer/supplier for information on recovery/recycling.

Section 3 – Composition / Information on Hazardous Ingredients

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>CAS NUMBER</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Tert-Butylphenol</td>
<td>98-54-4</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>2,4,6-Tris-(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>Trimethylhexane-1,6-diamine</td>
<td>25620-58-0</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>N’-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine</td>
<td>10563-29-8</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

Note: There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4 – First Aid Measures

General Advice: Immediately remove contaminated clothing. Exposure symptoms can appear after several hours. If contaminated consult medical advice up to 48 hours after exposure. 
First Aid: Wear protective equipment (i.e. protective gloves). If victim is unconscious: position and transport in “stable sideways position” to prevent asphyxiation if vomiting. Keep air passages open, remove dentures and vomit. Control breathing and pulse. If breathing and heart activity stops, administer CPR and call immediately emergency services.

After Inhalation: Remove subject to fresh air. Administer oxygen if difficulty with breathing. Consult a physician.

After Ingestion: Immediately seek medical attention. Do not induce vomiting. Drink plenty of water to dilute stomach contents.

After Skin Contact: Instantly wash skin with plenty of soap and water for at least 15 minutes. Wash clothing before reuse.
PRO PRIMER E RESIN - PART B

Section 5 – Fire Fighting Measures

Extinguishing Media: Carbon dioxide (CO₂), extinguishing powder, water spray. Do not use full water jet.

Special Fire Fighting Procedures: As in any fire, wear full protective gear and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards: Bursting and explosion of container possible due to increase of pressure when exposed to increasing heat. In case of fire, cool nearby containers with water fog. Formation of poisonous gases during heating or in fires possible.

Section 6 – Accidental Release Measures

Person-related Safety Precautions: Provide plenty of fresh air. Avoid eye and skin contact. Avoid inhalation of vapors. Wear personal protective equipment. Remove or eliminate all ignition sources.

Methods for Cleaning up: Contain and collect spillage with non-combustible, absorbent materials. i.e., sand, earth, vermiculate, diatomaceous earth, universal binders, sawdust and place in container for disposal.

Waste Disposal Method: Dispose in accordance with local, state and federal regulations.

Ecological Information: Do not allow product to reach ground water, bodies of water, storm water or sewage systems.

Section 7 – Handling and Storage

Handling: Avoid eye and skin contact. Keep out of reach of children.

Storage: Store in a cool, dry enclosed area off the ground in tightly closed containers. No special measures required against explosion and fires. Store away from foodstuffs. Provide fresh air when handling in closed rooms (open windows and doors).

Materials to avoid: No data available.

Section 8 – Exposure Controls / Personal Protection

Engineering Controls: Use with adequate general and local exhaust ventilation. Washing of the skin in the working area must be possible. Eye-wash station or bottle must be available.

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-phenylenebis (methylamine): 1477-55-0</td>
<td>0.1 mg/m³</td>
<td>0.1 mg/m³</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>
Respiratory Protection: Respirator in well ventilated areas not necessary. Wear a properly fitted NIOSH approved respirator in poorly ventilated areas or spillage.

Skin Protection: When installing, wear appropriate impervious gloves (neoprene) to prevent hand-skin exposure. Wear appropriate impervious clothing (acid and alkaline resistant) to prevent skin exposure (long sleeve shirt and long pants).

Eye Protection: Wear chemical splash goggles. Face shield as necessary.

Work/Hygienic Practices: Wash hands before breaks and after work, and before eating, drinking or smoking. Know the locations of eye wash fountains and emergency showers.

Section 9 – Physical and Chemical Properties

Physical State: Liquid
Appearance/Color: Yellowish
Odor: Amine like
Solubility in water: Not miscible or difficult to mix
Flash Point: >120°C (>248°F)
Flammability: Product is not self-igniting
Danger of explosion: Product is not explosive
Boiling Point: Not determined
Melting Point: Not determined
Bulk Density: 0.99 g/cm³ at 20°C (68°F)
Viscosity: (dynamic) 1400 cps (mPas) at 20°C (68°F)
VOC Concentration: 0 g/l

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Keep away from heat and ignition sources.
Hazardous Decomposition: No dangerous decomposition or emission products known if product handled as perspecifications.
Incompatibilities: No dangerous reactions known.

Section 11 – Toxicological Information

Acute Toxicity: 98-54-4 4-tert-Butylphenole

Oral LD50 2951 mg/kg (rat)
Dermal LD50 2288 mg/kg (rabbit)

Primary Irritation:
- Skin: Corrosive on skin and mucous membrane. Irritates skin and mucous membrane.
- Eyes: Strong corrosive reaction.
- Sensibility: Sensibility through contact with skin possible.

Additional Information: If ingested, highly corrosive to mouth and throat, as well as danger or perforation to esophagus and stomach.
PRO PRIMER E RESIN - PART B

Section 12 – Ecological Information

Environment: Toxic to aquatic systems. Do not allow product to reach into natural waterways, drains, storm water or wastewater systems.

General notes: Water hazard class 2 (Self-assessment): hazardous for water.

Section 13 – Disposal Considerations

Waste Disposal Method: Dispose of in a manner consistent with federal, state and local regulations. This includes pails containing uncured material. Pails with cured/hardened remains of product can be sent for recycling.

Recommendation: Product mixed with resin and fully cured is ecologically safe and can be disposed to local refuse deposit.

Section 14 – Transport Information

USDOT (Domestic Surface): UN 2735 Amines, liquid, corrosive, NOS, (trimethylhexanediamines, (m-phenylenebis (methylamine)) 8, PG III

IMDG (Ocean): UN 2735 Amines, liquid, corrosive, NOS, (N’-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, m-phenylenebis (methylamine)) 8, PG III

IATA/ICAO (Air): UN 2735 Amines, liquid, corrosive, NOS, (trimethylhexanediamines, (m-phenylenebis (methylamine)) 8, PG III

Section 15 – Regulatory Information

All raw materials are on the U.S., EPA, TSCA Inventory.

SARA Notification: Nothing in this product is subject to regulation under SARA 302, 313. It may be subject to SARA 312 reporting, depending upon the purchaser’s storage circumstances.

CERCLA: No CERCLA chemicals exist in this product above reportable concentrations.

Clean Air Act Ozone-Depletion Potential: This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section (40 CFR 61).

Section 16 – Other Information

(Hazard Rating: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe; * = Chronic)

HMIS III rating:
Health: 3* Flammability: 0 Physical hazard: 1
Abbreviations and acronyms:

USDOT: United States Department of Transportation.
IATA: International Air Transport Association.
CAS: Chemical Abstracts Service (Division of the American Chemical Society).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.
EC50: Median effective concentration.
RQ: Reportable quantity.

SDS prepared by: Siplast product safety department.

DISCLAIMER:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

User is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. We recommend that user makes tests to determine the suitability of a product for its particular purpose prior to use.

END OF SDS