



# SAFETY DATA SHEET

Issue Date 22-Aug-2016

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Version 1

## 1. IDENTIFICATION

**Product identifier**

**Product Name** EC-880 Resin

**Other means of identification**

**Product Code** 456B5

**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Industrial Coatings

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

BLOME INTERNATIONAL  
1450 Hoff Industrial Drive  
O'Fallon, MO 63366

**Emergency telephone number**

**Company Phone Number** 636-379-9119  
**Emergency Telephone** CHEMTREC: 800-424-9300  
CHEMTREC: 703-527-3887  
CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |            |
|--|------------|
| Skin corrosion/irritation                          | Category 2 |
| Serious eye damage/eye irritation                  | Category 2 |
| Skin sensitization                                 | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

**Label elements**

**Emergency Overview**

**Warning**

**Hazard statements**

Causes skin irritation  
Causes serious eye irritation  
May cause an allergic skin reaction  
May cause damage to organs through prolonged or repeated exposure

**Appearance** viscous**Physical state** liquid**Odor** Slight Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Contaminated work clothing should not be allowed out of the workplace  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 Take off contaminated clothing and wash before reuse  
 If skin irritation or rash occurs: Get medical advice/attention

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful if swallowed. Toxic to aquatic life with long lasting effects.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

| Chemical Name                         | CAS No     | Weight-% |
|---------------------------------------|------------|----------|
| Bisphenol A-epichlorohydrin polymer * | 25068-38-6 | 60 - 100 |
| Furfuryl alcohol *                    | 98-00-0    | 10 - 30  |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures****General advice**

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin contact**

Wash off immediately with plenty of water for at least 15 minutes. Wash contaminated

clothing before reuse. If skin irritation persists, call a physician.

**Inhalation**

Remove to fresh air. If symptoms persist, call a physician.

**Ingestion**

Rinse mouth. Drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Self-protection of the first aider**

Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed****Symptoms**

May cause redness and tearing of the eyes. May cause skin irritation. Redness.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

May cause sensitization in susceptible persons. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

In the event of fire and/or explosion do not breathe fumes. May cause sensitization in susceptible persons. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures****Personal precautions**

Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions****Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up****Methods for containment**

Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**

Use personal protective equipment as required. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

| Chemical Name               | ACGIH TLV                         | OSHA PEL                                  | NIOSH IDLH   |
|-----------------------------|-----------------------------------|---|--|
| Furfuryl alcohol<br>98-00-0 | STEL: 15 ppm<br>TWA: 10 ppm<br>S* | TWA: 50 ppm<br>TWA: 200 mg/m <sup>3</sup> | IDLH: 75 ppm<br>TWA: 10 ppm<br>TWA: 40 mg/m <sup>3</sup><br>STEL: 15 ppm<br>STEL: 60 mg/m <sup>3</sup> |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                                |                          |                                  |                          |
|--------------------------------|--------------------------|----------------------------------|--------------------------|
| <b>Physical state</b>          | liquid                   | <b>Odor</b>                      | Slight Solvent           |
| <b>Appearance</b>              | viscous                  | <b>Odor threshold</b>            | No information available |
| <b>Color</b>                   | amber                    |                                  |                          |
| <b>Property</b>                | <b>Values</b>            | <b>Remarks • Method</b>          |                          |
| pH                             | No information available |                                  |                          |
| Melting point / freezing point | No information available |                                  |                          |
| Boiling point / boiling range  | > 120 °C / > 248 °F      |                                  |                          |
| Flash point                    | 94 °C / 201 °F           | Pensky-Martens Closed Cup (PMCC) |                          |
| Evaporation rate               | No information available |                                  |                          |
| Flammability (solid, gas)      | No information available |                                  |                          |
| Flammability Limit in Air      |                          |                                  |                          |
| Upper flammability limit:      | 16.3%                    |                                  |                          |

|                                     |                          |
|-------------------------------------|--------------------------|
| <b>Lower flammability limit:</b>    | 1.8%                     |
| <b>Vapor pressure</b>               | No information available |
| <b>Vapor density</b>                | No information available |
| <b>Relative density</b>             | 1.1                      |
| <b>Water solubility</b>             | partially soluble        |
| <b>Solubility in other solvents</b> | No information available |
| <b>Partition coefficient</b>        | No information available |
| <b>Autoignition temperature</b>     | No information available |
| <b>Decomposition temperature</b>    | No information available |
| <b>Kinematic viscosity</b>          | No information available |
| <b>Dynamic viscosity</b>            | No information available |
| <b>Explosive properties</b>         | Not an explosive         |
| <b>Oxidizing properties</b>         | Not applicable           |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | < 90 g/L                 |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Elevated Temperature. Incompatible materials.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Based on available data, the classification criteria are not met.   |
| <b>Eye contact</b>  | Irritating to eyes.   |
| <b>Skin contact</b> | Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Ingestion</b>    | Based on available data, the classification criteria are not met.   |

| Chemical Name                                     | Oral LD50                               | Dermal LD50  | Inhalation LC50       |
|---|---|--|-----------------------|
| Bisphenol A-epichlorohydrin polymer<br>25068-38-6 | = 11400 mg/kg ( Rat )                   | -  | -                     |
| Furfuryl alcohol<br>98-00-0                       | = 110 mg/kg ( Rat ) = 177 mg/kg ( Rat ) | = 657 mg/kg ( Rabbit ) = 3825 mg/kg ( Rat ) = 400 mg/kg ( Rabbit ) | = 233 ppm ( Rat ) 4 h |

**Information on toxicological effects**

**Symptoms** May cause skin irritation. May cause an allergic skin reaction. May cause redness and tearing of the eyes.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause sensitization by skin contact.  
**Germ cell mutagenicity** Based on available data, the classification criteria are not met.  
**Carcinogenicity** Based on available data, the classification criteria are not met.  
**Reproductive toxicity** Based on available data, the classification criteria are not met.  
**STOT - single exposure** Based on available data, the classification criteria are not met.  
**STOT - repeated exposure** Based on available data, the classification criteria are not met.  
**Chronic toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure.  
**Target Organ Effects** Eyes, Skin, Central nervous system, Respiratory system.  
**Aspiration hazard** Based on available data, the classification criteria are not met.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 3,585.00 mg/kg  
**ATEmix (dermal)** 11,000.00  
**ATEmix (inhalation-dust/mist)** 5.01  
**ATEmix (inhalation-vapor)** 2,330.00

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name               | Algae/aquatic plants | Fish   | Crustacea                            |
|-----------------------------|----------------------|--|--------------------------------------|
| Furfuryl alcohol<br>98-00-0 | -                    | 32: 96 h Pimephales promelas mg/L<br>LC50 static | 328: 24 h Daphnia magna mg/L<br>EC50 |

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**IATA**

|                             |   |
|-----------------------------|---|
| <b>UN/ID no</b>             | UN3082  |
| <b>Proper shipping name</b> | Environmentally hazardous substance, liquid, n.o.s.   |
| <b>Hazard Class</b>         | 9   |
| <b>Packing Group</b>        | III   |
| <b>ERG Code</b>             | 9L  |
| <b>Special Provisions</b>   | A97, A158, A197   |
| <b>Description</b>          | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A-epichlorohydrin polymer), 9, III |

**IMDG**

|                             |   |
|-----------------------------|---|
| <b>UN/ID no</b>             | UN3082  |
| <b>Proper shipping name</b> | Environmentally hazardous substance, liquid, n.o.s.   |
| <b>Hazard Class</b>         | 9   |
| <b>Packing Group</b>        | III   |
| <b>EmS-No</b>               | F-A, S-F  |
| <b>Special Provisions</b>   | 274, 335  |
| <b>Description</b>          | UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A-epichlorohydrin polymer), 9, III |

**15. REGULATORY INFORMATION****International Inventories**

|                      |          |
|----------------------|----------|
| <b>TSCA</b>          | Complies |
| <b>DSL/NDSL</b>      | Complies |
| <b>EINECS/ELINCS</b> | Complies |
| <b>IECSC</b>         | Complies |
| <b>KECL</b>          | Complies |
| <b>PICCS</b>         | Complies |
| <b>AICS</b>          | Complies |

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name               | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| Furfuryl alcohol<br>98-00-0 | X          | X             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

|  |
|--|
| <b>16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION</b> |
|--|

|                                   |                                  |                |                    |                                    |
|-----------------------------------|----------------------------------|----------------|--------------------|------------------------------------|
| <b><u>NFPA</u></b>                | Health hazards 2                 | Flammability 1 | Instability 0      | Physical and Chemical Properties - |
| <b><u>HMIS</u></b>                | Health hazards 2*                | Flammability 1 | Physical hazards 0 | Personal protection X              |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> |                |                    |                                    |

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**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**