Ecopol-EC200
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 08/19/2013
Supersedes: 02/07/2011
Version: 1.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier
Product form: Mixture
Product name: Ecopol-EC200
Synonyms: Buffered Borate Crosslinker

Intended Use Of The Product
Use of the substance/mixture: Crosslinker

Name, Address, And Telephone Of The Responsible Party
Economy® Polymers & Chemicals
435 E. Anderson Road
77047 Houston, TX
T 713-723-8416, 1-800-231-2066
www.economypolymers.com

Emergency Telephone Number
Emergency number: CHEMTREC 1-800-424-9300 (US); 703-527-3887 (International, collect calls are accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification Of The Substance Or Mixture
GHS-US classification
Met. Corr. 1 H290
Acute Tox. 4 (Oral) H302
Skin Corr. 1A H314
Eye Dam. 1 H318
Repr. 1B H360
STOT RE 2 H373

Label Elements
GHS-US labeling
Hazard pictograms (GHS-US):

Signal word (GHS-US): Danger
Hazard statements (GHS-US):
- H290 - May be corrosive to metals.
- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H318 - Causes serious eye damage.
- H360 - May damage fertility or the unborn child.
- H373 - May cause damage to organs (kidneys, nervous system, reproductive system, liver) through prolonged or repeated exposure.

Precautionary statements (GHS-US):
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P234 - Keep only in original container.
- P260 - Do not breathe vapors, mist, spray.
- P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P280 - Wear gloves, protective clothing, eye protection, face protection, insufficient ventilation: respiratory protection.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
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<tr>
<td></td>
<td></td>
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<td>Acute Tox. 3 (Oral), H301</td>
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<td>Skin Corr. 1A, H314</td>
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<tr>
<td></td>
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<td></td>
<td>Eye Dam. 1, H318</td>
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<tr>
<td>disodium tetraborate pentahydrate, borax</td>
<td>(CAS No.) 12179-04-3</td>
<td>10-20</td>
<td>Eye Dam. 1, H318</td>
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<td>pentahydrate</td>
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<td>Ethylene glycol</td>
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<td></td>
<td></td>
<td>STOT RE 2, H373</td>
</tr>
<tr>
<td>Boric acid (H3BO3)</td>
<td>(CAS No.) 10043-35-3</td>
<td>7-13</td>
<td>Rep. 1B, H360</td>
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</tbody>
</table>

Full text of H-phrases: see section 16

Section 4: First Aid Measures

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER/doctor/physician if you feel unwell.
Most Important Symptoms And Effects Both Acute and Delayed

General: May damage fertility or the unborn child. Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Causes damage to organs. Harmful if swallowed.

Inhalation: Harmful if inhaled. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Skin Contact: Corrosive. Causes burns. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Eye Contact: Causes serious eye damage. Causes severe irritation which will progress to chemical burns.

Ingestion: Swallowing a small quantity of this material will result in serious health hazard. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms: Causes damage to organs through prolonged or repeated exposure (Liver, kidneys, nervous system, reproductive system)

Indication Of Any Immediate Medical Attention And Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable extinguishing media: Dry chemical, carbon dioxide, foam, water spray.

Unsuitable extinguishing media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From The Substance Or Mixture

Fire hazard: Not considered flammable but will burn at high temperatures.

Explosion hazard: Product is not explosive

Reactivity: Thermal decomposition generates: Corrosive vapours.

Advice For Firefighters

Precautionary measures fire: Not available

Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Potassium oxides. Carbon oxides (CO, CO\textsubscript{2}). Highly toxic and corrosive gases are released.

Reference To Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment And Emergency Procedures

General measures: Do not get in eyes, on skin, or on clothing. Do NOT breathe (vapor, mist, spray)

For Non-Emergency Personnel

Protective equipment: Use appropriate personal protection equipment (PPE).

Emergency procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods And Material For Containment And Cleaning Up

For containment: Stop leak without risks if possible

Methods for cleaning up: Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Reference To Other Sections

See heading 8, exposure controls and personal protection.
**SECTION 7: HANDLING AND STORAGE**

**Precautions For Safe Handling**

**Additional hazards when processed:** May be corrosive to metals. Container remains hazardous when empty. Continue to observe all precautions.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

**Conditions For Safe Storage, Including Any Incompatibilities**

**Technical measures:** Comply with applicable regulations.

**Storage conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container. Store away from incompatible materials.

**Incompatible materials:** Strong acids, Strong bases, Strong oxidizers, Alkalis, acetone, Tin, zinc, Metals, Chlorinated hydrocarbons.

**Storage area:** Keep away from combustible materials. Keep cool. Protect from sunlight. Keep away from sources of ignition - No smoking.

**Specific End Use(s)**

Crosslinker. For professional use only.

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

**Control Parameters**

### Glycerin (56-81-5)

<table>
<thead>
<tr>
<th>Region</th>
<th>Control Parameter (mg/m³)</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>OEL TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
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<td>10 mg/m³ (mist)</td>
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<tr>
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<td>OEL TWA (mg/m³)</td>
<td>3 mg/m³ (mist)</td>
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<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
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<tr>
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<td>OEL TWA (mg/m³)</td>
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<tr>
<td>Newfoundland &amp; Labrador</td>
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<td>10 mg/m³</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>OEL TWA (mg/m³)</td>
<td>10 mg/m³</td>
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<tr>
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<td>OEL STEL (mg/m³)</td>
<td>20 mg/m³</td>
</tr>
<tr>
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<td>10 mg/m³</td>
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</tr>
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### Ethylene glycol (107-21-1)

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<td>OEL Ceiling (mg/m³)</td>
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</tr>
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<td>British Columbia</td>
<td>OEL Ceiling (ppm)</td>
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</tr>
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</table>
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<th>OEL Ceiling (mg/m³)</th>
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<td>New Brunswick</td>
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<td>Ontario</td>
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#### Potassium hydroxide (1310-58-3)

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<tr>
<th>Province/Municipality</th>
<th>ACGIH Ceiling (mg/m³)</th>
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<td>2 mg/m³</td>
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<td>Manitoba</td>
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<td>Québec</td>
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<table>
<thead>
<tr>
<th>Boric acid (H3BO3) (10043-35-3)</th>
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<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH STEL (mg/m³)</td>
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<td>Manitoba</td>
<td>OEL TWA (mg/m³)</td>
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<tr>
<td>Saskatchewan</td>
<td>OEL TWA (mg/m³)</td>
</tr>
</tbody>
</table>

**Exposure Controls**

**Appropriate engineering controls**: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**: Goggles, face shield, gloves, protective clothing, insufficient ventilation: respiratory protection.

**Materials for protective clothing**: Chemically resistant materials and fabrics. Corrosion proof materials.

**Hand protection**: Wear chemically resistant protective gloves.

**Eye protection**: Chemical goggles or face shield.

**Skin and body protection**: Wear suitable protective clothing.

**Respiratory protection**: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

**Other information**: When using, do not eat, drink or smoke.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information On Basic 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</td>
<td>Clear, Colorless transparent liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Not available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>11.5 - 13.5</td>
</tr>
<tr>
<td>Relative evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>&lt; -30 °C (-22°F)</td>
</tr>
<tr>
<td>Freezing point</td>
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</tbody>
</table>

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Boiling point : Not available
Flash point : > 100 °C (212F)
Auto-ignition temperature : Not available
Decomposition Temperature : Not available
Flammability (solid, gas) : Not available
Lower flammable limit : Not available
Upper flammable limit : Not available
Vapour pressure : Not available
Relative vapour density at 20 °C : Not available
Relative density : 1.42
Specific gravity density : Not available
Log Pow : Not available
Log Kow : Not available
Viscosity, kinematic : Not available
Viscosity, dynamic : Not available
Explosion data - sensitivity to mechanical impact : Not available
Explosion data - sensitivity to static discharge : Not available

SECTION 10: STABILITY AND REACTIVITY
Reactivity Thermal decomposition generates :Corrosive vapours.
Chemical Stability Stable at standard temperature and pressure.
Possibility Of Hazardous Reactions Hazardous polymerization will not occur.
Conditions To Avoid Direct sunlight. Extremely high or low temperatures. Sparks. Open flame. Incompatible materials.

SECTION 11: TOXICOLOGICAL INFORMATION
Information On Toxicological Effects - Product
Acute toxicity : Harmful if swallowed.
LD50 and LC50 Data Not available
Skin corrosion/irritation: Causes severe skin burns and eye damage. pH: 11.5 - 13.5
Serious eye damage/irritation: Causes serious eye damage. pH: 11.5 - 13.5
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Teratogenicity: Not available
Carcinogenicity: Not classified
Specific target organ toxicity (repeated exposure): May cause damage to organs (kidneys, nervous system, reproductive system, liver) through prolonged or repeated exposure.
Reproductive toxicity: May damage fertility or the unborn child.
Specific target organ toxicity (single exposure): Not classified
Aspiration hazard: Not classified
Potential Adverse human health effects and symptoms: Harmful if swallowed.
Symptoms/injuries after inhalation: Harmful if inhaled. Contact may cause immediate severe irritation progressing quickly to chemical burns.
Symptoms/injuries after skin contact: Corrosive. Causes burns. Contact may cause immediate severe irritation progressing quickly to chemical burns.
Symptoms/injuries after eye contact: Causes serious eye damage. Causes severe irritation which will progress to chemical burns.

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Symptoms/injuries after ingestion: Swallowing a small quantity of this material will result in serious health hazard. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Information On Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rat</th>
<th>LC50 oral rat</th>
<th>LC50 dermal rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin (56-81-5)</td>
<td>12600 mg/kg</td>
<td>&gt; 21900 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol (107-21-1)</td>
<td>4000 mg/kg</td>
<td>3500 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium hydroxide (1310-58-3)</td>
<td>214 mg/kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boric acid (H3BO3) (10043-35-3)</td>
<td>2660 mg/kg</td>
<td>&gt; 2000 mg/kg</td>
<td>&gt; 0.16 mg/l (Exposure time: 4 h)</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Ethylene glycol (107-21-1)
National Toxicity Program (NTP) Status 1

Boric acid (H3BO3) (10043-35-3)
National Toxicity Program (NTP) Status 1

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LC50 fish 1</th>
<th>EC50 Daphnia 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerin (56-81-5)</td>
<td>51 (51 - 57) ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</td>
<td>&gt; 500 mg/l (Exposure time: 24 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>Ethylene glycol (107-21-1)</td>
<td>41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)</td>
<td></td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>EC50 other aquatic organisms</td>
<td>6500 - 13000 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)</td>
<td></td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</td>
<td></td>
</tr>
</tbody>
</table>

Potassium hydroxide (1310-58-3)

LC50 fish 1 | 80 mg/l (Exposure time: 96 h - Species: Gambusia affinis [static])

Boric acid (H3BO3) (10043-35-3)

LC50 fish 1 | 1020 mg/l (Exposure time: 72 h - Species: Carassius auratus [flow-through])

EC50 Daphnia 1 | 115 - 153 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Persistence And Degradability

Ecopol-EC200
Persistence and degradability Not established.

Bioaccumulative Potential

Ecopol-EC200
Bioaccumulative potential Not established.

Glycerin (56-81-5)

BCF fish 1 (no bioaccumulation)
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<table>
<thead>
<tr>
<th>Substance</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol (107-21-1)</td>
<td>-1.76</td>
</tr>
<tr>
<td>Potassium hydroxide (1310-58-3)</td>
<td>0.65</td>
</tr>
<tr>
<td>Boric acid (H3BO3) (10043-35-3)</td>
<td>-0.757</td>
</tr>
</tbody>
</table>

**Mobility In Soil** Not available

**Other Adverse Effects**

Other information: Avoid release to the environment.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional information: RCRA Waste Number: D001.

**SECTION 14: TRANSPORT INFORMATION**

In accordance with ICAO/IATA/DOT/TDG

UN Number
UN-No. (DOT): 1814
DOT NA no.: UN1814

UN Proper Shipping Name:

DOT Proper Shipping Name: Potassium hydroxide, solution (Contains, Potassium Hydroxide 19.95%)

Department of Transportation (DOT) Hazard Classes:

Hazard labels (DOT):

8 - Class 8 - Corrosive material 49 CFR 173.136
8 - Corrosive substances

DOT Special Provisions (49 CFR 172.102):

Packing group (DOT): III - Minor Danger

DOT Special Provisions (49 CFR 172.102):

DOT Packaging Exceptions (49 CFR 173.xxx):

DOT Packaging Non Bulk (49 CFR 173.xxx):

DOT Packaging Bulk (49 CFR 173.xxx):

Additional information:

Emergency Response Guide (ERG) Number: 154

**Overland transport** Not regulated for transport

Transport by sea:

DOT Vessel Stowage Location:

A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.
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DOT Vessel Stowage Other: 52 - Stow “separated from” acids
Air transport
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 60 L

SECTION 15: REGULATORY INFORMATION

US Federal regulations

Ecopol-EC200
SARA Section 311/312 Hazard Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed (chronic) health hazard</td>
<td>Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Glycerin (56-81-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

| EPA TSCA Regulatory Flag | Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule. |

Ethylene glycol (107-21-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)

| EPA TSCA Regulatory Flag | Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule. |

SARA Section 313 - Emission Reporting

Potassium hydroxide (1310-58-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Boric acid (H3BO3) (10043-35-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations

Glycerin (56-81-5)

<table>
<thead>
<tr>
<th>State</th>
<th>Regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)</td>
<td></td>
</tr>
<tr>
<td>U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)</td>
<td></td>
</tr>
<tr>
<td>U.S. - Hawaii - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Idaho - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Massachusetts - Right To Know List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Michigan - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Minnesota - Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Minnesota - Permissible Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual</td>
<td></td>
</tr>
<tr>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
<td></td>
</tr>
<tr>
<td>U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour</td>
<td></td>
</tr>
<tr>
<td>U.S. - Oregon - Permissible Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Pennsylvania - RTK (Right to Know) List</td>
<td></td>
</tr>
<tr>
<td>U.S. - Tennessee - Occupational Exposure Limits - TWAs</td>
<td></td>
</tr>
<tr>
<td>U.S. - Texas - Effects Screening Levels - Long Term</td>
<td></td>
</tr>
<tr>
<td>U.S. - Texas - Effects Screening Levels - Short Term</td>
<td></td>
</tr>
</tbody>
</table>
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| States | US | Vermont - Permissible Exposure Limits - TWAs
|       | US | Washington - Permissible Exposure Limits - STELs
|       | US | Washington - Permissible Exposure Limits - TWAs

**Ethylene glycol (107-21-1)**

| States | US | California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
|       | US | California - Toxic Air Contaminant List (AB 1807, AB 2728)
|       | US | Connecticut - Hazardous Air Pollutants - HLVs (30 min)
|       | US | Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
|       | US | Delaware - Pollutant Discharge Requirements - Reportable Quantities
|       | US | Hawaii - Occupational Exposure Limits - Ceilings
|       | US | Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
|       | US | Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
|       | US | Illinois - Toxic Air Contaminants
|       | US | Louisiana - Reportable Quantity List for Pollutants
|       | US | Maine - Air Pollutants - Hazardous Air Pollutants
|       | US | Massachusetts - Allowable Ambient Limits (AALs)
|       | US | Massachusetts - Allowable Threshold Concentrations (ATCs)
|       | US | Massachusetts - Drinking Water Guidelines
|       | US | Massachusetts - Right To Know List
|       | US | Massachusetts - Threshold Effects Exposure Limits (TELs)
|       | US | Massachusetts - Toxics Use Reduction Act
|       | US | Michigan - Occupational Exposure Limits - Ceilings
|       | US | Michigan - Polluting Materials List
|       | US | Minnesota - Groundwater Health Risk Limits
|       | US | Minnesota - Hazardous Substance List
|       | US | Minnesota - Permissible Exposure Limits - Ceilings
|       | US | New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
|       | US | New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
|       | US | New Jersey - Discharge Prevention - List of Hazardous Substances
|       | US | New Jersey - Environmental Hazardous Substances List
|       | US | New Jersey - Right to Know Hazardous Substance List
|       | US | New Jersey - Water Quality - Ground Water Quality Criteria
|       | US | New Jersey - Water Quality - Practical Quantitation Levels (PQLs)
|       | US | New York - Reporting of Releases Part 597 - List of Hazardous Substances
|       | US | North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour
|       | US | Oregon - Permissible Exposure Limits - TWAs
|       | US | Pennsylvania - RTK (Right to Know) - Environmental Hazard List
|       | US | Pennsylvania - RTK (Right to Know) List
|       | US | Rhode Island - Air Toxics - Acceptable Ambient Levels - 1-Hour
|       | US | Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual
|       | US | South Carolina - Toxic Air Pollutants - Maximum Allowable Concentrations
|       | US | South Carolina - Toxic Air Pollutants - Pollutant Categories
|       | US | Tennessee - Occupational Exposure Limits - Ceilings
|       | US | Texas - Effects Screening Levels - Long Term
|       | US | Texas - Effects Screening Levels - Short Term
|       | US | Vermont - Permissible Exposure Limits - Ceilings
|       | US | Washington - Permissible Exposure Limits - Ceilings
|       | US | Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
|       | US | Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
|       | US | Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
|       | US | Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

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## Potassium hydroxide (1310-58-3)

- U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
- U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
- U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
- U.S. - Hawaii - Occupational Exposure Limits - Ceilings
- U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
- U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
- U.S. - Louisiana - Reportable Quantity List for Pollutants
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
- U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
- U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
- U.S. - Massachusetts - Right To Know List
- U.S. - Massachusetts - Toxics Use Reduction Act
- U.S. - Michigan - Occupational Exposure Limits - Ceilings
- U.S. - Michigan - Polluting Materials List
- U.S. - Minnesota - Hazardous Substance List
- U.S. - Minnesota - Permissible Exposure Limits - Ceilings
- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
- U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
- U.S. - New Jersey - Right to Know Hazardous Substance List
- U.S. - New Jersey - Special Health Hazards Substances List
- U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
- U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 1-Hour
- U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
- U.S. - Pennsylvania - RTK (Right to Know) List
- U.S. - Tennessee - Occupational Exposure Limits - Ceilings
- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term
- U.S. - Vermont - Permissible Exposure Limits - Ceilings
- U.S. - Washington - Permissible Exposure Limits - Ceilings
- U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
- U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

## Boric acid (H3BO3) (10043-35-3)

- U.S. - Maine - Chemicals of High Concern
- U.S. - Minnesota - Chemicals of High Concern
- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
- U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
- U.S. - Texas - Effects Screening Levels - Long Term
- U.S. - Texas - Effects Screening Levels - Short Term

## Canadian regulations

### Ecopol-EC200

<table>
<thead>
<tr>
<th>WHMIS Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class E - Corrosive Material</td>
<td></td>
</tr>
<tr>
<td>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects</td>
<td></td>
</tr>
<tr>
<td>Class D Division 2 Subdivision B - Toxic material causing other toxic effects</td>
<td></td>
</tr>
</tbody>
</table>
**Water (7732-18-5)**
Listed on the Canadian DSL (Domestic Substances List) inventory.

**WHMIS Classification**
Uncontrolled product according to WHMIS classification criteria

**Glycerin (56-81-5)**
Listed on the Canadian DSL (Domestic Substances List) inventory.

**WHMIS Classification**
Uncontrolled product according to WHMIS classification criteria

**Ethylene glycol (107-21-1)**
Listed on the Canadian DSL (Domestic Substances List) inventory.
Listed on the Canadian Ingredient Disclosure List

**WHMIS Classification**
Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects

**Potassium hydroxide (1310-58-3)**
Listed on the Canadian DSL (Domestic Substances List) inventory.
Listed on the Canadian Ingredient Disclosure List

**WHMIS Classification**
Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects
Class E - Corrosive Material

**Boric acid (H3BO3) (10043-35-3)**
Listed on the Canadian DSL (Domestic Substances List) inventory.
Listed on the Canadian Ingredient Disclosure List

**WHMIS Classification**
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

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

**SECTION 16: OTHER INFORMATION**

**Indication of changes**
Revision date: 08/19/2013

**Other information**
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral) Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals Category 1</td>
</tr>
<tr>
<td>Repr. 1B</td>
<td>Reproductive toxicity Category 1B</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>skin corrosion/irritation Category 1A</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity (repeated exposure) Category 2</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H360</td>
<td>May damage fertility or the unborn child</td>
</tr>
<tr>
<td>H373</td>
<td>May cause damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>
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Party Responsible For The Preparation Of This Document:
Economy Polymers & Chemicals
435 E. Anderson Road Houston, TX 77047
713-723-8416; 1-800-231-2066

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS