SAFETY DATA SHEET

1. Identification

Material name: EUCON SRA-XT - BULK GALLONS
Material: 010XT 99

Recommended use and restriction on use
   Recommended use: Intermediate
   Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

   Health Hazards
   Skin Corrosion/Irritation Category 2
   Serious Eye Damage/Eye Irritation Category 1

   Unknown toxicity - Health
   Acute toxicity, oral 50 %
   Acute toxicity, dermal 51 %
   Acute toxicity, inhalation, vapor 100 %
   Acute toxicity, inhalation, dust or mist 100 %

Label Elements

Hazard Symbol:

Signal Word: Danger
Hazard Statement: Causes skin irritation. Causes serious eye damage.

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water/... If skin irritation occurs: Get medical advice/attention. Immediately call a POISON CENTER/doctor. Specific treatment (see on this label). Take off contaminated clothing.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly ethylene glycol monobutyl ether</td>
<td>9004-77-7</td>
<td>20 - &lt;50%</td>
</tr>
<tr>
<td>2-(2-(2-Butoxyethoxy)ethoxy)ethanol</td>
<td>143-22-6</td>
<td>20 - &lt;50%</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>1 - &lt;3%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed

Symptoms: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.

Indication of immediate medical attention and special treatment needed
## Treatment:
Symptoms may be delayed.

### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Use fire-extinguishing media appropriate for surrounding materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Do not use water jet as an extinguisher, as this will spread the fire.</td>
</tr>
</tbody>
</table>

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

<table>
<thead>
<tr>
<th>Special fire fighting procedures</th>
<th>No data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special protective equipment for fire-fighters</td>
<td>Self-contained breathing apparatus and full protective clothing must be worn in case of fire.</td>
</tr>
</tbody>
</table>

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

### 7. Handling and storage

**Precautions for safe handling:** Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Do not get in eyes. Wash hands thoroughly after handling. Avoid contact with skin.

**Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials. Store in original tightly closed container.
8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Ceiling</td>
<td>2 mg/m$^3$</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>2 mg/m$^3$</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
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<tr>
<td>Glycol ether solvent - Inhalable fraction and vapor.</td>
<td>TWA</td>
<td>10 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>CEILING</td>
<td>2 mg/m$^3$</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>CEV</td>
<td>2 mg/m$^3$</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
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<tr>
<td>Sodium hydroxide</td>
<td>CEILING</td>
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<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
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Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information:

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection:

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection
Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Do not get in eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Dark brown
Odor: Mild petroleum/solvent
Odor threshold: No data available.
pH: 10 - 12
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash Point: 104 °C 219 °F(Cleveland Open Cup)
Evaporation rate: Slower than Ether
Flammability (solid, gas): No
Upper/lower limit on flammability or explosive limits
- Flammability limit - upper (%): No data available.
- Flammability limit - lower (%): No data available.
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 1.011
Solubility(ies)
- Solubility in water: Practically Insoluble
- Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.
10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). Strong bases.

Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.

Skin Contact: May be harmful in contact with skin. Causes skin irritation.

Eye contact: Causes serious eye damage.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 16,250 mg/kg

Dermal Product: Not classified for acute toxicity based on available data.
Specified substance(s):
- Poly ethylene glycol mono butyl ether
  LD 50 (Rat): > 2,000 mg/kg
- 2-(2-(2-Butoxyethoxy)ethoxy)ethanol
  LD 50 (Rabbit): 3,540 mg/kg

Inhalation
Product:

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
- Poly ethylene glycol mono butyl ether
  in vivo (Rabbit): Not irritant  Experimental result, Key study
- 2-(2-(2-Butoxyethoxy)ethoxy)ethanol
  in vivo (Rabbit): Not irritant  Experimental result, Key study
- Sodium hydroxide
  in vivo (Rabbit): Irritating  Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):
- Poly ethylene glycol mono butyl ether
  Rabbit: Category 2A
  Rabbit: Strongly irritating.
- 2-(2-(2-Butoxyethoxy)ethoxy)ethanol
  Rabbit, 48 hrs: Category 1
  Rabbit, 48 h: Corrosive.
- Sodium hydroxide
  Rabbit, 1 d: 10% Sodium Hydroxide- Category 1; 0.5% Sodium Hydroxide-
  Slightly irritating to eyes

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
Sodium hydroxide
LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 125 mg/l Mortality
Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Sodium hydroxide
EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 34.59 - 47.13 mg/l
Intoxication

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Biocentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.
14. Transport information

TDG:
Not Regulated

CFR / DOT:
Not Regulated

IMDG:
Not Regulated

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

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<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
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<tbody>
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Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Skin Corrosion or Irritation
Serious eye damage or eye irritation

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

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<td>Sodium hydroxide</td>
<td>1000 lbs.</td>
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SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly ethylene glycol mono butyl ether</td>
<td>10000 lbs</td>
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<tr>
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SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
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<td>2-(2-(2-Butoxyethoxy)ethoxy)ethanol</td>
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</tbody>
</table>

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

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<tr>
<td>Sodium hydroxide</td>
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</table>

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

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<tbody>
<tr>
<td>2-(2-(2-Butoxyethoxy)ethoxy)ethanol</td>
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</tbody>
</table>

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable
VOC:
Regulatory VOC (less water and exempt solvent) : 0 g/l
VOC Method 310 : 0.00 %
### Inventory Status:

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia AICS</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada DSL Inventory List</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>EINECS, ELINCS or NLP</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan (ENCS) List</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
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<tr>
<td>China Inv. Existing Chemical Substances</td>
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<tr>
<td>Korea Existing Chemicals Inv. (KECI)</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Canada NDSL Inventory</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Philippines PICCS</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
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<tr>
<td>US TSCA Inventory</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>New Zealand Inventory of Chemicals</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan ISHL Listing</td>
<td>All components in this product are listed on or exempt from the Inventory.</td>
</tr>
<tr>
<td>Japan Pharmacopoeia Listing</td>
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</tr>
<tr>
<td>Mexico INSQ</td>
<td>One or more components in this product are not listed on or exempt from the Inventory.</td>
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<tr>
<td>Ontario Inventory</td>
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<tr>
<td>Taiwan Chemical Substance Inventory</td>
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16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Revision Date:</th>
<th>02/12/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #:</td>
<td>4.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
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</table>

**Disclaimer:** For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.