SAFETY DATA SHEET

1. Identification

Material name: EUCON X15 - BULK GALLONS
Material: 710 99

Recommended use and restriction on use
Recommended use: Additive
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
Acute toxicity (Oral) Category 4

Unknown toxicity - Health
Acute toxicity, oral 25.61 %
Acute toxicity, dermal 25.64 %
Acute toxicity, inhalation, vapor 48.4 %
Acute toxicity, inhalation, dust or mist 48.4 %

Label Elements

Hazard Symbol:

Signal Word: Warning
Hazard Statement: Harmful if swallowed.
Precautionary Statements

Prevention: Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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>Calcium nitrate</td>
<td>10124-37-5</td>
<td>10 - &lt;25%</td>
</tr>
<tr>
<td>Sodium thiocyanate</td>
<td>540-72-7</td>
<td>1 - &lt;5%</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: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

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**

**Suitable extinguishing media:**
Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:**
Do not use water jet as an extinguisher, as this will spread the fire.

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

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:**
No data available.

**Special protective equipment for fire-fighters:**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**
No data available.

**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:**
Do not taste or swallow. Wash hands thoroughly after handling. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**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**
None of the components have assigned exposure limits.
None of the components have assigned exposure limits.

### 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:** Use personal protective equipment as required.
- **Eye/face protection:** Wear goggles/face shield.
- **Skin Protection Hand Protection:** Use suitable protective gloves if risk of skin contact.
- **Other:** No data available.
- **Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
- **Hygiene measures:** Do not eat, drink or smoke when using the product. Wash hands after handling.

### 9. Physical and chemical properties

#### Appearance
- **Physical state:** liquid
- **Form:** liquid
- **Color:** Brown
- **Odor:** Mild
- **Odor threshold:** No data available.
- **pH:** 3.0 - 6.0
- **Melting point/freezing point:** No data available.
- **Initial boiling point and boiling range:** No data available.
- **Flash Point:** No data available.
- **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:** +/- 0.020 1.27
- **Solubility(ies)**
  - Solubility in water: Soluble
  - 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.
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: Moderately irritating to skin with prolonged exposure.
Eye contact: Eye contact is possible and should be avoided.
Ingestion: Harmful if swallowed.

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: 1,012.29 mg/kg
Dermal Product: ATEmix: 6,590.63 mg/kg
Inhalation
Product: Not classified for acute toxicity based on available data.

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
- Calcium nitrate: in vivo (Rabbit): Not irritant  Read-across from supporting substance (structural analogue or surrogate), Key study
- Sodium thiocyanate: In vitro Not irritant  Experimental result, Key study

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

Specified substance(s):
- Calcium nitrate: Rabbit, 24 - 72 hrs: Category 1
- Sodium thiocyanate: Not severe irritant or corrosive

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):
- Calcium nitrate: LC 50 (Oncorhynchus mykiss, 96 h): > 100 mg/l
- Sodium thiocyanate: LC 50 (Oncorhynchus mykiss, 96 h): 65 mg/l

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
- Calcium nitrate: EC 50 (Daphnia magna, 48 h): 490 mg/l

Chronic hazards to the aquatic environment:

Fish

800000051724
| Product: | No data available. |
|--------------------------------------------------|
| Specified substance(s): Sodium thiocyanate | NOAEL (Cyprinus carpio, 7 d): 20 mg/l Experimental result, Supporting study |
| Aquatic Invertebrates Product: | No data available. |
| Toxicity to Aquatic Plants Product: | No data available. |

### Persistence and Degradability

<table>
<thead>
<tr>
<th>Biodegradation Product:</th>
<th>No data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD/COD Ratio Product:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

| Bioaccumulative potential Bioconcentration 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

<table>
<thead>
<tr>
<th>Disposal instructions:</th>
<th>Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated Packaging:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

### 14. Transport information

<table>
<thead>
<tr>
<th>TDG:</th>
<th>Not Regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR / DOT:</td>
<td>800000051724</td>
</tr>
</tbody>
</table>
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):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lbs.</td>
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</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate (Acute) Health Hazards
Acute toxicity

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

SARA 304 Emergency Release Notification

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<td>1000 lbs.</td>
</tr>
<tr>
<td>[1,1'-Biphenyl]-2-ol, sodium salt (1:1)</td>
<td>1000 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
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<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
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<tr>
<td>Calcium nitrate</td>
<td>10000 lbs</td>
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<td>Sodium thiocyanate</td>
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SARA 313 (TRI Reporting)

<table>
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<tr>
<th>Chemical Identity</th>
<th></th>
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<tr>
<td>Calcium nitrate</td>
<td></td>
</tr>
</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**
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

[1,1'-Biphenyl]-2-ol, sodium salt (1:1)  
Carcinogenic. 09 2011

**US. New Jersey Worker and Community Right-to-Know Act**
**Chemical Identity**
Calcium nitrate

**US. Massachusetts RTK - Substance List**
**Chemical Identity**
[1,1'-Biphenyl]-2-ol, sodium salt (1:1)

**US. Pennsylvania RTK - Hazardous Substances**
No ingredient regulated by PA Right-to-Know Law present.

**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:
Australia AICS: One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List: All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP: One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List: One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances: One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI): One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory: One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS: One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory: All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals: One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing: One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing: One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision

Revision Date: 10/26/2017
Version #: 2.1
Further Information: No data available.
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.