SAFETY DATA SHEET

1. Identification

Material name: EUCON A+ - BULK GALLONS
Material: 026B 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 12.54 %
- Acute toxicity, dermal 12.81 %
- Acute toxicity, inhalation, vapor 47.88 %
- Acute toxicity, inhalation, dust or mist 47.87 %

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 CENTRE/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>25 - &lt;50%</td>
</tr>
<tr>
<td>Sodium thiocyanate</td>
<td>540-72-7</td>
<td>5 - &lt;10%</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1 - &lt;1%</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 CENTRE/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**

<table>
<thead>
<tr>
<th>Occupational Exposure Limits</th>
</tr>
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<td>Chemical Identity</td>
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</table>

800000050632
Sodium hydroxide

Ceiling 2 mg/m³

US. ACGIH Threshold Limit Values (2011)

PEL 2 mg/m³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

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: 6 - 8
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: +/- 0.01 1.3
Solubility(ies)

800000050632
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: 848.17 mg/kg
Dermal
Product: ATEmix: 5,001.92 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
Sodium hydroxide in vivo (Rabbit): Irritating Experimental result, Weight of Evidence 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
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

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 (Bluegill (Lepomis macrochirus), 96 h): 2,400 mg/l Mortality
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.

**Specified substance(s):**

Sodium thiocyanate

NOAEL (Cyprinus carpio, 7 d): 20 mg/l Experimental result, Supporting study

LOAEL (Pimephales promelas, 124 d): 12.2 mg/l Read-across based on grouping of substances (category approach), Key study

LOAEL (Oncorhynchus mykiss, 16 Weeks): 115 mg/l Read-across based on grouping of substances (category approach), Supporting study

NOAEL (Pimephales promelas, 124 d): 1.84 mg/l Read-across based on grouping of substances (category approach), Key study

NOAEL (Oncorhynchus mykiss, 16 Weeks): 77 mg/l Read-across based on grouping of substances (category approach), Supporting study

**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**

**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

**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):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
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<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1000 lbs.</td>
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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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<tr>
<td>[1,1'-Biphenyl]-2-ol, sodium salt (1:1)</td>
<td></td>
</tr>
</tbody>
</table>
SARA 311/312 Hazardous Chemical

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<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
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<td>10000 lbs</td>
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SARA 313 (TRI Reporting)

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<td>Calcium nitrate</td>
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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

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US. Massachusetts RTK - Substance List

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<td>[1,1'-Biphenyl]-2-ol, sodium salt (1:1)</td>
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</table>

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: 07/31/2017
Version #: 3.0

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.