SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Ver-tech Labs
6801 Bleck Drive
Rockford, MN 55373
1-877-866-9742

Product Name: Apogee
Product Code: EXT129
Recommended Use: High pH Presoak
Revision Date: 3/12/2015

Chemical Emergency: Infotrac: 1-800-535-5053

SECTION 2: HAZARDS IDENTIFICATION

GHS Hazard Classification

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>1</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>1</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (Single Exposure) - Oral</td>
<td>1</td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>1</td>
</tr>
</tbody>
</table>

Signal Word
DANGER!

Hazard Statements
Causes severe skin burns and eye damage
Causes serious eye damage
Causes damage to organs
May be corrosive to metals

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Do not eat, drink or smoke when using this product
Keep only in original container

Precautionary Statements - Response
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
Call a POISON CENTER or doctor/physician if you feel unwell
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store locked up
Store in a corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

SECTION 3: INFORMATION ON HAZARDOUS INGREDIENTS

Product is a mixture according to 29 CFR 1910.1200.

Hazardous Components

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>Cas #</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide, Caustic Soda</td>
<td>1310-73-2</td>
<td>10 - 20%</td>
</tr>
<tr>
<td>Proprietary Blend</td>
<td>Trade Secret</td>
<td>5 - 15%</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of components has been withheld in accordance with a trade secret claim according to Appendix E 29 CFR 1910.1200.
**SECTION 4: FIRST-AID MEASURES**

**First Aid Measures**

**General Advice:** Contains Sodium Hydroxide. Harmful or fatal if swallowed. Wear protective clothing when handling this product. Keep out of reach of children. Use with care.

**Eye Contact:** Immediately flush with cool running water for at least 15 minutes while holding eyelids apart. Do not rub affected area. Remove contact lenses if applicable.

**Skin Contact:** Wash off immediately with soap and water while removing all contaminated clothes and shoes.

**Ingestion:** If swallowed, may cause burning of the mouth, throat and stomach. Call immediately for medical assistance. DO NOT induce vomiting. Rinse mouth with water, then drink 1-2 glasses of water. Never give anything by mouth to an unconscious person.

**Inhalation:** Remove to fresh air.

**Most Important Symptoms and Effects**

**Symptoms:** Severe burns to eyes, skin, and respiratory tract.

**Indication of any immediate medical attention and special treatment needed**

**Note to Physician:** Product is a corrosive material. Treat symptomatically.

**SECTION 5: FIRE-FIGHTING MEASURES**

**Flammable Properties**

**Flammability:** Not considered to be a fire hazard.

**Explosive Prop:** Not considered to be an explosive hazard.

**Extinguishing Media**

**Suitable:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable:** Adding water to caustic solution generates large amounts of heat.

**Specific Hazards Arising from Chemical**

**Hazards:** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition may lead to release of irritating and toxic vapors. In the event of fire and/or explosion do not breathe fumes.

**Protective equipment and precautions for fire-fighters**

**Fire-Fight Method:** In the event of a fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Evacuate personnel to safe areas. Isolate hazard area and deny entry. Stay upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes or clothing.

**Environ. Precautions:** Prevent release to the environment if possible. Dike large spills to prevent material from entering streams or sewer systems.

**Clean-Up Method:** Soak-up with inert absorbent material and place into appropriate container for disposal. Clean contaminated area thoroughly with water. Prevent product from entering drains.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Use personal protective equipment when needed. Avoid contact with skin, eyes, and clothing. Wash hands before eating, drinking, or smoking. Remove contaminated clothes and wash before reuse. Use in a ventilated area.

**Storage:** Store in closed containers in cool, dry, well-ventilated area. Avoid overheating or freezing. Keep in properly labeled containers and out of reach of children.

**Incomp. Materials:** Strong acids and bases. Oxidizing agents. Aluminum, Tin and Zinc.

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

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide, Caustic Soda</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>Proprietary Blend</td>
<td>Not Determined</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

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Appropriate Engineering Controls

Eng. Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protection Equipment (PPE)

Eyes: Recommend safety goggles or shield.
Respiratory: Not usually necessary where ventilation is sufficient to maintain vapors under the TLV limit.
Skin: Avoid skin contact. Recommend chemical resistant gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Red Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Red</td>
</tr>
<tr>
<td>Odor:</td>
<td>Clean, fresh scent</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>No information available</td>
</tr>
<tr>
<td>pH:</td>
<td>14.0</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>1.16 - 1.20</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.
Haz. Decomposition: Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Haz. Polymerization: No information available.
Incompatibilities: Strong acids and bases, strong oxidizing agents. Aluminum, Tin, and Zinc.
Conditions to Avoid: Heat, moisture and incompatibles.

SECTION 11: TOXICOLOGY INFORMATION

Component Information

<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide, Caustic Soda</td>
<td>Not Determined</td>
<td>1350 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Proprietary Blend</td>
<td>Not Determined</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

Potential Health Effects

Exposure Routes: Eye Contact, Dermal Contact, Ingestion, Inhalation

Acute Toxicity:

- Eyes: Causes eye irritation with tearing, redness, and impaired vision.
- Skin: Causes skin irritation, redness, and itching. May cause chemical burns.
- Ingestion: Harmful if swallowed. Corrosive to mucous membranes, esophagus and stomach.
- Inhalation: Respiratory irritant.

Chronic Effects: Avoid repeated exposure. May aggravate pre-existing medical conditions including eye, skin and respiratory disorders.
Carcinogenicity: Not listed as carcinogen by OSHA, NTP or IARC.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hydroxide, Caustic Soda</td>
<td>45.4: 96 h Oncorhynchus mykiss mg/L</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Proprietary Blend</td>
<td>Not Determined</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>
Environmental Toxicity

Biodegradation: No information available.
Persistence: This product is alkaline and may raise the pH of surface waters.
Bioaccumulation: This product is believed not to bioaccumulate.
Mobility: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Recover or recycle if possible. Disposal should be in compliance with applicable federal, state, and local regulations. Do not dispose of in the environment, in sewage, and/or in drains.
Container: Drain contaminated container thoroughly. Do not reuse container.

SECTION 14: TRANSPORT INFORMATION

Transport in accordance with all federal, state, and local regulations.

DOT

Proper Name: Corrosive Liquid, Basic, Inorganic, n.o.s. (Sodium Hydroxide)
Hazard Class: 8
UN Number: UN3266
Packing Group: II
Special Provisions: Based on package size, product may be eligible for limited quantity exception.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

TSCA Status: All components of this product are listed or exempt from listing on TSCA inventory.
CERCLA Reportable Quantity: Sodium Hydroxide, 1000 lbs.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Hazardous Chemical</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Section 311/312 Hazard Category

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Section 313 Toxic Chemicals

None

SECTION 16: OTHER INFORMATION

Prepared by: Health and Safety Department
Contact Number: 1-877-866-9742
Issue Date: 3/12/2015
Revision Date: 3/12/2015
Revision Note: MSDS converted to GHS SDS format
Version: 1

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End of Safety Data Sheet

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