1. IDENTIFICATION

Product Identifier
Product Name Powdered Presoak & Detarnisher

Other Means of Identification
Product Code 311100

Recommended Use of the Chemical and Restrictions on Use
Recommended Use Granular presoak. For industrial use.

Details of the Supplier of the Safety Data Sheet
Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number
Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Light Blue
Physical State Powder
Odor None

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>2</td>
</tr>
</tbody>
</table>

Hazards Not Otherwise Classified (HNOC)
May be harmful if swallowed

Signal Word
Warning

Hazard Statements
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
311100 - Powdered Presoak & Detarnisher

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a poison center or doctor/physician if you feel unwell

Unknown Acute Toxicity
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>497-19-8</td>
<td>40-70</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>10-30</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate</td>
<td>7758-29-4</td>
<td>7-13</td>
</tr>
<tr>
<td>Sodium Metasilicate</td>
<td>6834-92-0</td>
<td>7-13</td>
</tr>
<tr>
<td>Nonylphenoxypolyethoxethanol</td>
<td>68412-54-4</td>
<td>1-5</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is “proprietary” and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Ingestion
Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. If any discomfort persists, obtain medical attention.

Most Important Symptoms and Effects

Symptoms
Causes serious eye irritation. Causes skin irritation. Prolonged or repeated exposure can remove natural skin oils and may produce irritation. Harmful if inhaled. May be harmful if swallowed.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician
Treat symptomatically. May aggravate pre-existing skin disorders.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
None known.

Hazardous Combustion Products
Normal products of combustion.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions  
Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions  
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information. See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

Methods for Containment  
Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Methods for Clean-Up  
Contain and collect with an inert absorbent and place into an appropriate container for disposal. Rinse area with clean water and dry before permitting traffic.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling  
Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. For industrial and commercial use only. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions  
Keep container tightly closed and store in a cool, dry and well-ventilated place. Protect from freezing. Keep out of the reach of children.

Incompatible Materials  
None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate 497-19-8</td>
<td>-</td>
<td>15 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Chloride 7647-14-5</td>
<td>TWA: 15 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate 7758-29-4</td>
<td>15 mg/m³</td>
<td>15 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Metasilicate 6834-92-0</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Engineering Controls  
Ensure adequate ventilation, especially in confined areas. Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection  
Use chemical splash goggles or glasses as necessary to prevent contact.

Skin and Body Protection  
Not usually necessary under conditions of normal use. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory Protection  
Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations  
Handle in accordance with good industrial hygiene and safety practice. Wash face, hands...
and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks · Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Light Blue</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Light Blue</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH (1%)</td>
<td>11.5-12.0</td>
<td>as a 1% w/w solution</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Moderately soluble</td>
<td>@ 25 °C (77 °F)</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

None known.

### Hazardous Decomposition Products

Normal products of combustion.

11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

**Product Information**

**Eye Contact**
Causes serious eye irritation.
Skin Contact
Causes skin irritation.

Inhalation
Harmful if inhaled.

Ingestion
May be harmful if swallowed.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate 497-19-8</td>
<td>4090 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Chloride 7647-14-5</td>
<td>3 g/kg (Rat)</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td>&gt; 42 g/m³ (Rat) 1 h</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate 7758-29-4</td>
<td>3100 mg/kg (Rat)</td>
<td>&gt; 7940 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Metasilicate 6834-92-0</td>
<td>600 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nonylphenoxypolyethoxylethanol 68412-54-4</td>
<td>3310 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on Physical, Chemical and Toxicological Effects

Symptoms
Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined

Unknown Acute Toxicity
None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate 497-19-8</td>
<td>242: 120 h Nitzschia mg/L EC50</td>
<td>300: 96 h Lepomis macrochirius mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
<td>265: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Sodium Chloride 7647-14-5</td>
<td>-</td>
<td>5560 - 6080: 96 h Lepomis macrochirius mg/L LC50 flow-through 12946: 96 h Lepomis macrochirius mg/L LC50 static 6020 - 7070: 96 h Pimephales promelas mg/L LC50 static 7050: 96 h Pimephales promelas mg/L LC50 semi-static 4620 - 6700: 96 h Pimephales promelas mg/L LC50 static 4747 - 7824: 96 h Oncorhynchus mykiss mg/L LC50 flow-through</td>
<td>-</td>
<td>1000: 48 h Daphnia magna mg/L EC50 340.7 - 469.2: 48 h Daphnia magna mg/L EC50 Static</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate 7758-29-4</td>
<td>-</td>
<td>1650: 48 h Leuciscus idus mg/L LC50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sodium Metasilicate 6834-92-0</td>
<td>-</td>
<td>210: 96 h Brachydanio rerio mg/L LC50 semi-static 210: 96 h Brachydanio rerio mg/L LC50</td>
<td>-</td>
<td>216: 96 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>
### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>Corrosive</td>
</tr>
<tr>
<td>497-19-8</td>
<td></td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**Note**
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**
Not regulated

**IATA**
Not regulated

**IMDG**
Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**
Not determined

**Legend**
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECS** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**US Federal Regulations**

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 311/312 Hazard Categories**
Acute Health Hazard: Yes
Chronic Health Hazard: No

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
The following ingredients appear on various state right to know lists and/or California's Proposition 65 List:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>State List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Chloride 7647-14-5</td>
<td>NJ, PA</td>
</tr>
<tr>
<td>Sodium Tripolyphosphate 7758-29-4</td>
<td>MA &amp; PA</td>
</tr>
</tbody>
</table>

AZ- Arizona Ambient Air Quality Guidelines
CT- Connecticut Hazardous Air Pollutants
CA- California Director's List of Hazardous Substances
CAP65- California Prop65
FL- Florida Substances List
ID- Idaho Non-Carcinogen Toxic Air Pollutants
IL- Illinois Toxic Air Contaminant- Carcinogenic
MA- Massachusetts Right to Know List
MN- Minnesota Hazardous Substances List
NJ- New Jersey Right to Know List
PA- Pennsylvania Right to Know List
RI- Rhode Island Hazardous Substances List

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td></td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
<td>Not determined</td>
</tr>
</tbody>
</table>

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Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet