SECTION 1: IDENTIFICATION

Product name: PENPOWER 225L
Recommended use: Cleaner, degreaser
Physical Description: White free-flowing powder with bland odor
Generic Ingredients: Inorganic builders and surfactant

Manufacturer: Penetone Corporation
125 Kingsland Ave.
Clifton, NJ 07014
800-631-1652 or 201-567-3000

Business Contact: Customer Service
800-631-1652 x2602 or 2272
Product Safety
800-631-1652 x2211 or 2257

Emergency Phone Numbers: PENETONE 201-567-3000 CHEMTREC 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

<table>
<thead>
<tr>
<th>Health:</th>
<th>Acute toxicity - oral: 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin irritation: 1</td>
<td>Physical: not classified</td>
</tr>
<tr>
<td>Eye irritation: 1</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity - single exposure: 3</td>
<td></td>
</tr>
</tbody>
</table>

DANGER!
Causes Severe Skin Burns and Eye Damage.
May Cause Respiratory Irritation.
Harmful if Swallowed.

Precautions:

**Prevention:**
Do not breathe dust. Use only outdoors or in a well ventilated area. Do not eat, drink or smoke when using this product.
Wear protective gloves, clothing, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling.

**Response:**
*If on skin or hair:* Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
*If in eyes:* Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
*If swallowed:* Rinse mouth. Do NOT induce vomiting.

*If inhaled:* Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor/ emergency room/ or 911.

**Storage:**
Store locked up. Store in a well ventilated place. Keep container tightly closed.

**Disposal:**
Dispose of contents/container in accordance with local, regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Concentration Wt% (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>30-50</td>
</tr>
<tr>
<td>Sodium tripolyphosphate</td>
<td>7758-29-4</td>
<td>20-40</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>7722-88-5</td>
<td>10-30</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST-AID MEASURES

General Description of Symptoms & First-Aid Measures
Most likely work-place exposure routes will be skin contact or inhalation.

For skin contact, typically no immediate effects will be observed. A tingling or burning sensation might be felt some time after exposure. Slight reddening or minor irritation could also develop if product is not quickly washed off.

Inhalation exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms could include coughing, sneezing, and a tingling or burning sensation in the nose, throat, and lungs.

Eyes
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice. Penetone recommends that after any eye exposure a physician be seen immediately.

Ingestion
If swallowed: Rinse mouth. DO NOT INDUCE VOMITING. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice.

Inhalation
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a local Poison Control Center, physician, or other competent medical authority for medical advice.

Skin
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used to wash skin. Wash contaminated clothing before reuse. Immediately call a local Poison Control Center, doctor, physician or other competent medical authority for medical advice.

Special Treatment / Other
None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties
Classification: Non-flammable
Flash Point: None-to-boil
Autoignition Temperature: Not applicable
Lower Flammable Limit: Not applicable Upper Flammable Limit: Not applicable

Specific Hazards
Product is a powder and presents no unusual fire hazards.

Extinguishing Media
Use extinguishing agents appropriate for controlling surrounding fire.

Unsuitable: None.

Protection & Precautions for Firefighters
Protective Equipment & Clothing: Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.
Fire Fighting Guidance: Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do it safely. Dike fire control water for later disposal; do not scatter material. Containers can expand and explode under fire conditions due to vapor buildup. Always stay away from containers engulfed in fire.

Hazardous Combustion Products: Smoke, fumes, and oxides of carbon, phosphorus, and silicon when burned.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill
Sweep up material. Put all material into proper waste disposal container with lid tightly covered. Rinse area with plenty of water.

Water Spill
This is a powder and will completely mix/dissolve in water making recovery difficult. Undissolved powder should be recovered if possible. This product is alkaline and will raise the pH of surface waters. Localized high concentration of product may cause fish kills, but no persistent or long term effects are anticipated. Check with local environmental regulatory agencies for reporting requirements.

See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.

SECTION 7: HANDLING & STORAGE

Handling
Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Do not cut, weld, or reuse empty container.

Storage
Store locked up. Keep container tightly closed when not in use. Do not store near strong acids. Do not store in direct sunlight. Avoid storing above 120°F (49°C).

SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection
Inhalation  A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Use of an organic vapor mask or respirator is recommended.

Skin  Wear chemical resistant gloves such as: rubber, nitrile, neoprene, or latex when skin contact is possible. Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn depending on how the product is used. PPE should be cleaned thoroughly after each use.

Eyes  Penetone recommends always wearing safety glasses as a minimum in any workplace. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

Additional Remarks
Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.
SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: white free flowing powder
Odor: bland
Odor Threshold: not determined
pH: not applicable
Melting Point / Freezing: not applicable
Boiling Point / Boiling Point Range: not applicable
Flash Point: not applicable
Evaporation Rate: not applicable
Flammability: not applicable
Lower Flammable Limit: not applicable
Upper Flammable Limit: not applicable
Explosive Properties: not applicable
Vapor Pressure: not applicable
Relative Vapor Density: equal to water
Relative Density: not applicable
Solubility (Water): soluble in water
Partition Coefficient (K<sub>ow</sub>): not determined
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity: not applicable

SECTION 10: STABILITY & REACTIVITY

Reactivity
Product will react with acids. Addition of acid or water to this product may generate large amounts of heat and may cause splattering.

Chemical Stability
Stable.

Hazardous Reactions
Mixing with acids will give off heat and may cause splattering.

Conditions to Avoid
Do not store near strong acids.

Incompatible Materials
Strong acids.

Hazardous Decomposition Products
Smoke, fumes, and oxides of carbon, phosphorus, and silicon when burned.
SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary
This product is an alkaline powder and contains sodium metasilicate. The product should be considered corrosive to all tissues. Contact with skin and/or eyes, ingestion, or inhalation of dust may be corrosive. Possible effects include severe irritation, burns, and permanent damage to exposed tissues if immediate action is not taken.

Acute Toxicity:
- **Dermal**: LD50 > 2,000 mg/kg rabbit (estimated using additivity formula)
- **Inhalation**: No data available
- **Oral**: LD50 about 1,500 mg/kg rat (estimated using additivity formula)

Skin Corrosion/Irritation
Corrosive. Causes skin burns. Prolonged or repeated skin exposures can result in dermatitis.

Serious Eye Damage/Irritation
Corrosive. Causes serious eye damage which can result in severe irritation, pain and burns, and permanent damage including blindness.

Sensitization - Respiratory or Skin
No data for the product. Based upon components, product is not expected to be a respiratory or skin sensitizer.

Germ Cell Mutagenicity
No data for the product. Based upon components, product is not expected to result in germ cell mutagenicity.

Carcinogenicity
Does not contain a material listed by ACGIH, IARC, or NTP as a carcinogen.

Reproductive / Developmental Toxicity
No data for the product. Insufficient data for the components to evaluate. Based upon partial component data, product is not expected to be a reproductive or developmental toxicant.

Specific Target Organ Effects - Single Exposure
No data for the product.

Specific Target Organ Effects - Repeated or Prolonged Exposure
No data for the product.

Frequent ingestion over extended periods of time of gram quantities of sodium silicate are associated with kidney stone formation and other siliceous urinary calculi in humans.

Inorganic phosphates have been extensively studied because of their use as food additives. Very high oral doses (1% in the diet) have produced toxic effects on the kidneys and parathyroid glands.

Aspiration Hazard
Product form makes it not likely to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary
This material is alkaline and will raise the pH of surface waters. Product should be considered nontoxic to aquatic organisms.

Ecotoxicity
LC50/EC50 100-500 mg/l (estimated using additivity formula)

Ecotoxicity
LC50/EC50 100-500 mg/l (estimated using additivity formula)
Persistence and Degradability
Inorganic components will dissociate into their ionic form in the aquatic environment. Natural carbon dioxide will slowly neutralize them. The surfactant used is biodegradable.

Bioaccumulative Potential
Bioaccumulation potential of the materials used in this product are low.

Other Adverse Effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

The product as received is a nonhazardous waste. Wet powder or solutions may be a D002 Corrosive Hazardous Waste if they have a pH equal to or greater than 12.5. Dispose of contents/container in accordance with all applicable federal, state, and local regulations.

Note: Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Appropriate hazardous waste designation is the responsibility of the user.

SECTION 14: TRANSPORT INFORMATION

ID No.: UN3262
Proper Shipping Name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (contains sodium metasilicate)
Hazard Class: 8
Packing Group: III
Label: CORROSIVE
Marine Pollutant: No
RQ: not applicable
Special Precautions: none

SECTION 15: REGULATORY INFORMATION

TSCA
The ingredients in this product are listed on the TSCA inventory.

RCRA HAZARD CLASS
Nonhazardous waste - see comments in Section 13.

SARA 311/312 REPORTABLE HAZARD CATEGORIES: Immediate (Acute) Health  Fire

REPORTING REQUIREMENTS (all quantities in pounds)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS / 313 Code</th>
<th>Section 302 (EHS) TPQ</th>
<th>Section 304 EHS RQ</th>
<th>CERCLA RQ (1)</th>
<th>Section 313</th>
<th>CAA 112(r) TQ</th>
<th>CWA / OPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No component subject to reporting requirements</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains sodium metasilicate (CAS# 683-92-0), sodium tripolyphosphate (CAS# 7758-29-4), and tetrasodium pyrophosphate (CAS# 7772-88-5), and alkoxylated linear alcohol (CAS# 88551-13-3).
CALIFORNIA PROPOSITION 65 INFORMATION
This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION
Is there a photochemically reactive material present? No
What is the % by volume of photochemically reactive material? 0
What is the VOC content? 0
What is the vapor pressure of VOC's? 0

SECTION 16: OTHER INFORMATION

HAZARD RATING SYSTEMS:

<table>
<thead>
<tr>
<th></th>
<th>HMIS</th>
<th>NFPA</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>2</td>
<td>2</td>
<td>4 = Severe</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
<td>0</td>
<td>3 = Serious</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>B</td>
<td>0</td>
<td>2 = Moderate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Slight</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 = Minimal</td>
</tr>
</tbody>
</table>

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000

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