SAFETY DATA SHEET
Penetone Corporation, 125 Kingsland Ave., Clifton, NJ 07014

STEAM-KLEEN®

SECTION 1: IDENTIFICATION

Product name: STEAM KLEEN
Recommended use: General purpose degreaser and steam cleaner
Physical Description: Light amber liquid with mild odor
Generic Ingredients: Water, inorganic builders, surfactants, and chelate

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>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin irritation: 2</td>
<td>not classified</td>
</tr>
<tr>
<td>Eye irritation: 2A</td>
<td></td>
</tr>
</tbody>
</table>

WARNING!
Causes Skin Irritation.
Causes Serious Eye Irritation.

Precautionary Statements:

Prevention:
Wear protective gloves, clothing, eye protection, and face protection.
Wash hands and exposed skin thoroughly after handling.

Response:
If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
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.

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>Water</td>
<td>7732-18-5</td>
<td>75-90</td>
</tr>
<tr>
<td>Potassium phosphate</td>
<td>7778-53-2</td>
<td>1-10</td>
</tr>
<tr>
<td>Sodium silicate</td>
<td>1344-09-8</td>
<td>1-10</td>
</tr>
<tr>
<td>Ethoxylated nonylphenol</td>
<td>127087-87-0</td>
<td>1-10</td>
</tr>
<tr>
<td>Potassium soap of rosin tall oil fatty acid</td>
<td>612790-44-1</td>
<td>1-10</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>1-10</td>
</tr>
<tr>
<td>Potassium hydrogen phosphate</td>
<td>7758-11-4</td>
<td>1-10</td>
</tr>
<tr>
<td>Sodium xylene sulfonate</td>
<td>1300-72-7</td>
<td>1-10</td>
</tr>
</tbody>
</table>

(1) Exact percentages being withheld under trade secret provision of OHSA HCS 1910.1200(i)
SECTION 4: FIRST-AID MEASURES

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

For skin contact, typically no immediate effects will be observed. A slight tingling 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. Typical symptoms could include coughing, sneezing, and a tingling 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. If eye irritation persists or develops: Get medical advice or attention. Penetone recommends that after any eye exposure a physician be seen immediately.

Ingestion
If swallowed: Rinse mouth. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

Inhalation
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

Skin
If on skin: Wash with plenty of water or a mild soap. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice or attention.

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 water based 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, nitrogen, and sulfur when taken to dryness.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill
Stop leak if you can do it safely. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spill, soak up with absorbent material and place in properly labeled containers for disposal.

Water Spill
This is a water based product and will completely mix/dissolve in water making recovery difficult. Product is alkaline and may raise pH of waters with low buffering capacity. 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
Keep container tightly closed when not in use. Do not store near strong acids or bases. 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 a general purpose particulate mask or respirator with particulate filter 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.

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Source</th>
<th>Value</th>
<th>Type</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No OELs have been established for any of the components</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

**Appearance:** Light amber liquid  
**Odor:** mild  
**Odor Threshold:** not determined  
**pH:** 11-11.5  
**Melting Point / Freezing:** about 32°F  
**Boiling Point / Boiling Point Range:** about 212°F  
**Flash Point:** none to boil  
**Evaporation Rate:** equal to water  
**Flammability:** not applicable  
**Lower Flammable Limit:** not applicable  
**Upper Flammable Limit:** not applicable  
**Explosive Properties:** not applicable  
**Vapor Pressure:** equal to water  
**Relative Vapor Density:** not applicable  
**Relative Density:** 1.11  
**Solubility (Water):** water soluble  
**Partition Coefficient (K_{ow}):** not determined  
**Auto-ignition temperature:** not applicable  
**Decomposition temperature:** not determined  
**Viscosity:** less than 5 centipoise at room temperature

**SECTION 10: STABILITY & REACTIVITY**

**Reactivity**  
Product is not reactive, but if strong acids or bases are added, heat will be generated which could cause splattering.

**Chemical Stability**  
Stable.

**Hazardous Reactions**  
None.

**Conditions to Avoid**  
Do not store near strong acids or bases.

**Incompatible Materials**  
Strong acids or bases.

**Hazardous Decomposition Products**  
Oxides of carbon, nitrogen, and sulfur when taken to dryness and burned.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Product Summary**  
Based upon ingredient data, product is non-toxic by oral and dermal routes exposure. Based upon ingredient information, product is expected to cause skin irritation and to cause serious eye irritation.
Acute Toxicity:
Dermal: > 10,000 mg/kg rabbit (estimated from additivity formula)
Inhalation: no data available
Oral: >10,000 mg/kg rat (estimated from additivity formula)

Skin Corrosion/Irritation
Causes skin irritation. Based upon component data.

Serious Eye Damage/Irritation
Causes serious eye irritation. Based upon component data.

Sensitization - Respiratory or Skin
Not expected to be a skin or respiratory sensitizer. Based upon component data.

Germ Cell Mutagenicity
No data available. Not expected to be mutagenic based upon partial component information and comparison to structurally similar compounds.

Carcinogenicity
Does not contain components considered carcinogenic.

Developmental/Reproductive Toxicity
No data available. Not expected to be a developmental or reproductive toxin based upon partial component information and comparison to structurally similar compounds.

The nonionic surfactant used in this product have produced effects in the fetus only at levels that were toxic to the parent animals.

Specific Target Organ Effects - Single Exposure
No data available.

Specific Target Organ Effects - Repeated or Prolonged Exposure
No data available.

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.

The nonionic surfactant used in this product exhibited kidney and liver effects in lab animals at high feeding levels over extended periods of time.

Aspiration Hazard
Based upon components, product not expected to be aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary
Product is expected to be harmful to toxic to fish and aquatic invertebrates. (Acute aquatic toxicity category 2-3 by European Union classification).

Ecotoxicity
LC50/EC50 about 10 mg/l (estimated using additivity formula)

Persistence and Degradability
Product components considered biodegradable.
Bioaccumulative Potential
Product components not considered bioaccumulative

Mobility in soil
No soil mobility data available.

Other Adverse Effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a nonhazardous waste under RCRA definitions. 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.: None
Proper Shipping Name: Nonhazardous (nonregulated) material
Hazard Class: None
Packing Group: None
Label: None
Marine Pollutant: Not applicable
RQ: None
Special Precautions: None

SECTION 15: REGULATORY INFORMATION

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

RCRA HAZARD CLASS
Nonhazardous waste

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

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</th>
<th>Section 313</th>
<th>CAA 112(r) TQ</th>
<th>CWA / OPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>no component is subject to reporting requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
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NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains water (CAS 7732-18-5), potassium phosphate (CAS# 7778-53-2), sodium silicate (CAS# 1344-09-8), ethoxylated nonylphenol (CAS# 127087-87-0), and potassium fatty acid soap (CAS# 61790-44-1).

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? Not applicable

SECTION 16: OTHER INFORMATION

HAZARD RATING SYSTEMS:

<table>
<thead>
<tr>
<th>HAZARD</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

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

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