SECTION 1: IDENTIFICATION

Product name: PENETONE 169
Recommended use: Degrease
Physical Description: Clear water white solution with mild odor
Generic Ingredients: Water, surfactants, glycol ether, inorganic builders, 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:

Health:
Skin irritation: 2
Eye irritation: 2A

Physical:
not classified

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>Diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>1-10</td>
</tr>
<tr>
<td>Tetrapotassium phosphate</td>
<td>7320-34-5</td>
<td>1-10</td>
</tr>
<tr>
<td>Ethoxylated nonylphenol</td>
<td>127087-87-0</td>
<td>1-10</td>
</tr>
<tr>
<td>Dipotassium hydrogen phosphate</td>
<td>7758-11-4</td>
<td>1-10</td>
</tr>
<tr>
<td>Potassium dihydrogen phosphate</td>
<td>7778-77-0</td>
<td>1-10</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>1-10</td>
</tr>
<tr>
<td>Sodium xylene sulfonate</td>
<td>1300-72-7</td>
<td>1-10</td>
</tr>
<tr>
<td>Sodium alkylimidazolinium dicarboxylate</td>
<td>60298-20-4</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 work-place 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, phosphorus, and sulfur when taken to dryness and burned.

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: clear water white liquid
Odor: mild
Odor Threshold: not determined
pH: 9-10
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: 1.08
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, phosphorus, 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: > 5,000 mg/kg rabbit (estimated from additivity formula)
Inhalation: no data available
Oral: > 5,000 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 component information.

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.

No effects were seen in male/female rats in a 2 generation reproductive toxicity study of the nonionic surfactant used in this product.

Specific Target Organ Effects - Single Exposure
No data available.

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

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.

Diethylene glycol butyl ether: Effects on the kidney, liver, and blood were found in lab animals at high feeding levels over extended periods of time.

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 nontoxic to fish and aquatic invertebrates.

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

Persistence and Degradability
Product components considered readily 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>Diethylene glycol butyl ether</td>
<td>N230 Glycol ethers</td>
<td>(1)</td>
<td></td>
<td>313</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains water (CAS 7732-18-5), diethylene glycol monobutyl ether (CAS# 112-34-5), tetrapotassium phosphate (CAS# 7320-34-5), ethoxylated nonylphenol (CAS# 127087-87-0), and dipotassium hydrogen phosphate (CAS# 7758-11-4).
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? 50 g/l
What is the vapor pressure of VOC's? <0.1 mm Hg @20°C. Record keeping requirements for applications listed under Rule 1171 may not apply

SECTION 16: OTHER INFORMATION

HAZARD RATING SYSTEMS:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>HMIS</th>
<th>NFPA</th>
<th>KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

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

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF PENETONE’S KNOWLEDGE. THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.