SECTION 1: IDENTIFICATION

Product name: PEN-STRIP 3936C
Recommended use: Hot tank paint stripper
Physical Description: Clear water white to pale amber diphase liquid with mild odor
Generic Ingredients: NMP, ethanolamines, surfactant, water, oil seal

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

Business Contact:
Customer
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>Specifiic target organ toxicity - single exposure: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion: 1C</td>
<td>Carcinogenicity: 2</td>
</tr>
<tr>
<td>Eye damage: 1</td>
<td>Physical: not classified</td>
</tr>
</tbody>
</table>

DANGER!
Causes Severe Skin Burns and Eye Damage.
May Damage Fertility or the Unborn Child.
May Cause Respiratory Irritation.
Suspected of Causing Cancer.

Precautionary Statements:

Prevention:
Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
Do not breathe mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area.
Wear protective gloves, clothing, eye protection, and face protection.
Wash hands and exposed skin thoroughly after handling.

Response:
If exposed or concerned: Get medical advice/attention.
If swallowed: Rinse mouth. Do NOT induce vomiting.
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 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>N-Methylpyrrolidone</td>
<td>872-50-4</td>
<td>60-75</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>141-43-5</td>
<td>15-25</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>1-10</td>
</tr>
</tbody>
</table>
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 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: Greater than 200°F
Autoignition Temperature: Not determined
Lower Flammable Limit: Not determined  Upper Flammable Limit: Not determined

Specific Hazards
Product will burn at elevated temperatures (>200°F). The product is water dilutable and will self extinguish with addition of water.

Extinguishing Media
Suitable: SMALL FIRE: Use dry chemical, carbon dioxide (CO₂), water spray or regular foam. LARGE FIRE: water spray, water fog, or foam.

Unsuitable: Do not use solid water stream as this may spread fire.
**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 and nitrogen.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Land Spill**
Adsorb spillage to prevent material damage. 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. Neutralize residue with dilute acid and follow with a liberal covering of sodium bicarbonate or other acceptable drying agent.

**Water Spill**
Except for the oil phase, this product will completely mix/dissolve in water making recovery difficult. This product will raise the pH of surface waters. Check with local environmental regulatory agencies for reporting requirements.

*See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.*

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**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).

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**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.

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>N-Methylpyrrolidone</td>
<td>ACGIH</td>
<td>100 mg/l</td>
<td>BEI</td>
<td>5-hydroxy-N-methylpyrrolidone in urine, End of shift</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>ACGIH</td>
<td>3 ppm</td>
<td>TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 ppm</td>
<td>STEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>3 ppm</td>
<td>TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 ppm</td>
<td>STEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OHSZ1</td>
<td>3 ppm</td>
<td>TWA</td>
<td></td>
</tr>
<tr>
<td>2-Ethanolamine</td>
<td>ACGIH</td>
<td>1 mg/m³ (IFV)</td>
<td>TWA</td>
<td>skin; A3</td>
</tr>
<tr>
<td></td>
<td>NIOSH</td>
<td>3 ppm</td>
<td>TWA</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Clear water white to pale amber diphase liquid
Odor: mild
Odor Threshold: not determined
pH: not applicable
Melting Point / Freezing: about 25°F
Boiling Point / Boiling Point Range: about 212°F
Flash Point: greater than 200°F
Evaporation Rate: equal to water
Flammability: not applicable
Lower Flammable Limit: not determined
Upper Flammable Limit: not determined
Explosive Properties: not applicable
Vapor Pressure: equal to water
Relative Vapor Density: equal to water
Relative Density: 1.00
Solubility (Water): soluble in water, oil seal insoluble
Partition Coefficient (K<sub>ow</sub>): not determined
Auto-ignition temperature: not applicable
Decomposition temperature: not applicable
Viscosity: less than 5 centipoise at room temperature

SECTION 10: STABILITY & REACTIVITY

Reactivity
Product will react with acids, giving off heat.

Chemical Stability
Stable.

Hazardous Reactions
Mixing with acids will give off heat and may cause splattering.
Conditions to Avoid
Corrosive liquid. Do not store near strong acids.

Incompatible Materials
Strong acids. Oxidizing agents.

Hazardous Decomposition Products
Oxides of carbon and nitrogen when burned.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary
This product contains ethanolamine and should be considered corrosive to all tissues. Contact with skin and/or eyes, ingestion, or inhalation of spray mist 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 > 4,400 mg/kg rabbit (estimated using additivity formula)
- **Inhalation:** No data available
- **Oral:** LD50 > 2,500 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
No data for the product.

Diethanolamine is listed by IARC as Group 2B: possibly carcinogenic to humans and by ACGIH as Group 3A: confirmed animal carcinogen with unknown relevance to humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Diethanolamine in the presence of nitrites can form suspected cancer causing nitrosamines.

NMP was tumorigenic at high doses in rats. This is thought to be a rodent-specific liver effect not relevant to humans. NMP as a whole is not considered carcinogenic.

Reproductive/Developmental Toxicity
No data for the product.

Monoethanolamine has produced effects in the fetus only at levels that were toxic to the parent animals.

NMP may cause damage to the testes after repeated inhalation of high doses that caused other toxic effects. NMP has caused malformations/developmental toxicity in laboratory animals.

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

For monoethanolamine, kidney and liver effects were found in the kidney and liver of lab animals at high feeding levels over extended periods of time.

Aspiration Hazard
Based upon available data, product is not likely to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary
This material will raise the pH of surface waters with low buffering capacity. Product should be considered nontoxic to aquatic organisms.

Ecotoxicity
LC50/EC50 100-200 mg/l (estimated using additivity formula)

Persistence and Degradability
Materials used in this product are all readily biodegradable.

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

Other Adverse Effects
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a D002 Corrosive Hazardous 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

<table>
<thead>
<tr>
<th>ID No.</th>
<th>UN3267</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains ethanolamine)</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>8</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>Label</td>
<td>CORROSIVE</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>No</td>
</tr>
<tr>
<td>RQ:</td>
<td>100 lbs for diethanolamine CAS 111-42-2 or about 2,500 lbs or 300 gallons of product</td>
</tr>
<tr>
<td>Special Precautions</td>
<td>none</td>
</tr>
</tbody>
</table>

SECTION 15: REGULATORY INFORMATION

TSCA
The ingredients in this product are listed on the TSCA inventory.
RCRA HAZARD CLASS
Product is considered nonhazardous under RCRA.

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>Diethanolamine</td>
<td>111-42-2</td>
<td>100</td>
<td></td>
<td></td>
<td>313</td>
<td>2,500</td>
<td>300 gal</td>
</tr>
<tr>
<td>Product RQ for component</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Releases exceeding the RQ just be reported to the National Response Center, 800-424-8802 and may be subject to state and local reporting.
(2) CERCLA hazardous substance with no assigned RQ

NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains N-methylpyrrolidone (CAS 872-50-4), monoethanolamine (CAS 141-43-5), water (CAS 7732-18-5), ethoxylated linear alcohol (CAS 68439-46-3), diethanolamine (CAS 111-42-2), and hydrotreated heavy naphthenic distillates (CAS 64742-52-5).

CALIFORNIA PROPOSITION 65 INFORMATION
This product contains a chemical recognized by the state of California to cause cancer (diethanolamine) and a chemical that causes birth defects or reproductive harm (N-methylpyrrolidone).

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? About 800 g/l
What is the vapor pressure of VOC’s? Less than 0.1 mm Hg at 20°C. Record keeping requirements for applications listed under Rule 1171 may not apply.

SECTION 16: OTHER INFORMATION

REVISION SUMMARY
Change in Section 1

SUPERSEDES ISSUE DATE
July 12, 2019

HAZARD RATING SYSTEMS:

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