SECTION 1: IDENTIFICATION

Product name: NAVITONE
Recommended use: Degreaser
Physical Description: Clear amber liquid with aromatic odor
Generic Ingredients: Aromatic hydrocarbons, water, surfactants, coupling agents, inorganic builders

Manufacturer: Penetone Corporation
Business Contact: Customer Service
125 Kingsland Ave. 800-631-1652 x2602 or 2272
Clifton, NJ 07014 Product Safety
800-631-1652 or 201-567-3000 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 corrosion: 1C
- Eye damage: 1
- Specific target organ toxicity - single exposure: 3

Aspiration hazard: 1

Physical:
- not classified

DANGER!
Causes Severe Skin Burns and Eye Damage.
May Cause Drowsiness or Dizziness.
May Be Fatal If Swallowed and Enters Airways.

Precautionary Statements:

Prevention:
- Avoid breathing fumes or vapors. Do not breathe mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area.
- Wear protective gloves, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling.

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 inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center, doctor, emergency room or 911 if you feel unwell.
- If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center, doctor, emergency room, or 911.

Storage:
- Store locked up. Store in a well-ventilated place. Keep cool. 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>Aromatic petroleum naphtha</td>
<td>64742-94-5</td>
<td>25-50</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>25-50</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. Reddening, irritation, or a burning sensation could develop some time after exposure if product is not quickly washed off.

Inhalation exposure may produce varied effects depending on whether vapor or mist/spray is inhaled (see SECTION 8 for recommended workplace exposure limits). For vapor, typical symptoms would include headaches, dizziness, and drowsiness. In extreme cases, unconsciousness and other central nervous effects may occur. For mist/spray, 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. If contact lenses present, remove them if easy to do. Continue rinsing for several minutes. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice. Penetone recommends that after any eye exposure and initial treatment a physician be seen immediately.

Ingestion
If swallowed: Rinse mouth. Immediately call a poison center, doctor, physician or other competent medical authority. Product presents an aspiration hazard. DO NOT INDUCE VOMITING.

Inhalation
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center, doctor, physician or other competent medical authority for medical advice.

Skin
If on skin: Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice or attention.

Special Treatment / Other
None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties
Classification: not classified
Flash Point: none to boil
Autoignition Temperature: not determined
Lower Flammable Limit: not determined Upper Flammable Limit: not determined

Specific Hazards
Contains combustible solvent. Although no flash point up to 200°F, combustible vapors may be given off above this
temperature. The product is water based and 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, sulfur, and phosphorus, particularly when taken to dryness.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Land Spill**

Eliminate sources of ignition. Do not touch or walk through spilled material. 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**

Product forms emulsion with water which may make cleanup difficult. Avoid agitation to minimize emulsion formation. Remove product from water surface by skimming or with suitable absorbents. Put into properly labeled containers for reclamation or disposal. If allowed by local environmental regulatory agencies, you may use a suitable dispersant. 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**

Do not handle near heat, sparks, or flame. Avoid contact with oxidizing agents. Use only with adequate ventilation/personal protection (SEE section 8). Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Dispose of empty containers with care. Empty containers can contain flammable residue and explosive vapors. *Do not cut, weld, or reuse empty container.*

**Storage**

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Do not store near heat, sparks, open flame, or other ignition sources. Do not store near strong oxidizing agents. 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>
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</thead>
<tbody>
<tr>
<td>Aromatic petroleum naphtha</td>
<td>ACGIH</td>
<td>100 mg/m³</td>
<td>TWA</td>
<td>Appendix H</td>
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<tr>
<td></td>
<td>NIOSH</td>
<td>350 mg/m³</td>
<td>TWA</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1800 mg/m³</td>
<td>Ceiling</td>
<td></td>
</tr>
<tr>
<td>Borate compounds, inorganic</td>
<td>ACGIH</td>
<td>2 mg/m³ (I)</td>
<td>TWA</td>
<td>A4</td>
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<tr>
<td></td>
<td>NIOSH</td>
<td>6 mg/m³ (I)</td>
<td>STEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³</td>
<td>TWA</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 9: PHYSICAL & CHEMICAL PROPERTIES**

**Appearance:** clear amber liquid

**Odor:** aromatic

**Odor Threshold:** not determined

**pH:** 12

**Melting Point / Freezing:** about 30°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 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):** forms emulsion (stable for one to 12 hours)

**Partition Coefficient (K_{ow}):** not determined

**Auto-ignition temperature:** not determined

**Decomposition temperature:** not determined

**Viscosity:** 10 to 30 centipoise at room temperature
SECTION 10: STABILITY & REACTIVITY

Reactivity
Not reactive.

Chemical Stability
Stable.

Hazardous Reactions
None known.

Conditions to Avoid
Contains combustible liquid. Do not store near sources of heat, sparks, open flame, or other ignition sources.

Incompatible Materials
Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products
Smoke, fumes, and oxides of carbon, nitrogen, and sulfur, particularly when taken to dryness.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary
Product is corrosive to skin, eyes, and other tissues, including oral and gastrointestinal. Mists can be corrosive to the eyes and respiratory tract. Ingestion may result in damage to the mouth, tongue, throat, and esophagus. Vapor/aerosol concentrations above recommended exposure levels may be irritating to the eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects.

Acute Toxicity:
- Dermal: Rabbits, LD50 > 2,000 mg/kg (estimated using additivity formula)
- Inhalation: no data available
- Oral: Rats, LD50 > 2,000 mg/kg (estimated using additivity formula)

Skin Corrosion/Irritation
Based upon component data and product pH, product as a whole may be corrosive to the skin.

Serious Eye Damage/Irritation
Based upon component data and product pH, product as a whole may be corrosive to the eyes and potentially cause serious eye damage.

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

Germ Cell Mutagenicity
Based upon component data, not expected to cause germ cell mutagenicity.

Carcinogenicity
ACGIH lists inorganic borate compounds A4: Not classifiable as a human carcinogen.

Reproductive Toxicity
No data available.

The nonionic surfactant used in this product has produced effects in the fetus only at levels that were toxic to the parent animals.
For borates, fetal weight loss and minor skeletal variations have been seen in animal feeding studies. In a prenatal development toxicology study of rats an NOEL of 55 mg boric acid/ kg bw was observed. No adverse fertility effects were seen in sperm of highly exposed borate workers when a subset of these workers were exposed to 125 mg boron /day. Epidemiological studies of exposed borate workers and populations living in areas with high boron levels were also negative.

Specific Target Organ Effects - Single Exposure
No data available.

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

The aromatic hydrocarbon caused kidney effects in male rats which are not considered relevant to humans.

Borates: Chronic study, rat, oral, NOAEL 17.5 mg B/kg bw/day in chronic feeding study (2 years in rats based on testes effects). Other effects (kidney, haemopoietic sytem) seen only at higher dose levels. Classification criteria not met.

In three month study, rats fed 200, 600, and 1800 ppm sodium silicate, changes were reported in the blood chemistry of some animals, but no specific organ effects were observed. In a 4 week 2.4g/kg/day oral feeding study, kidney effects were seen in dogs but no observed effects seen in rats. 600 and 1200 ppm sodium silicate in drinking water of rats decreased number of births and survival to weaning. 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
Based upon available data and comparison to similar materials, if swallowed, may pose a lung aspiration hazard during vomiting. Lung aspiration may result in chemical pneumonitis, pulmonary edema, and damage to lung tissue or death.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary
Product is expected to be toxic to fish, aquatic invertebrates, algae, and microorganisms. (Acute aquatic toxicity category 2 by European Union classification).

Ecotoxicity
LC/EC/IC 1-10 mg/l (estimated using additivity formula)

Persistence and Degradability
Product components range in biodegradability from not readily to readily biodegradable.

Bioaccumulative Potential
No data available for the product. Aromatic solvent used in this product has the potential to bioaccumulate.

Mobility in soil
No data available for the product. Product is a complex mixture. Components will partition into water and soil phases depending on inherent solubility of component in water.

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

ID No.: UN3266
Proper Shipping Name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., (contains sodium silicate)
Hazard Class: 8
Packing Group: III
Label: CORROSIVE
Marine Pollutant: No
RQ: No
Special Precautions: none

SECTION 15: REGULATORY INFORMATION

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

RCRA HAZARD CLASS
D002 - Corrosive hazardous waste

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</th>
<th>Section 313</th>
<th>CAA 112(r) TQ</th>
<th>CWA / OPA</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>no components subject to reporting</td>
</tr>
</tbody>
</table>

NEW JERSEY RIGHT-TO-KNOW INFORMATION
This product contains aromatic petroleum naphtha (CAS# 64742-94-5), water (CAS# 7732-18-5), potassium dodecylbenzene sulfonate (CAS# 27177-77-1), potassium fatty acid soap (CAS# 61790-44-1), ethoxylated nonylphenol (CAS# 127087-87-0), dipropylene glycol (CAS# 25265-71-8), tetrapotassium pyrophosphate (CAS# 7320-34-5), borax pentahydrate (CAS# 17179-04-3), sodium silicate (CAS# 1344-09-8), and tripotassium phosphate (CAS# 7778-53-2).

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? Yes
What is the % by volume of photochemically reactive material? About 40
What is the VOC content? 420 g/l
What is the vapor pressure of VOC's? Less than 1 mm Hg @ 20°C
SECTION 16: OTHER INFORMATION

REVISION SUMMARY
Change in Section 1

SUPERSEDES ISSUE DATE
September 26, 2016

HAZARD RATING SYSTEMS:

<table>
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<tr>
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<th>HMIS</th>
<th>NFPA</th>
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<tbody>
<tr>
<td>HEALTH</td>
<td>2</td>
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</tr>
<tr>
<td>FLAMMABILITY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
<td>0</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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