SECTION 1: IDENTIFICATION

Product name: PENAIR C5575
Recommended use: Exterior aircraft cleaner, gel type degreaser
Physical Description: Clear to hazy, yellow-orange viscous liquid with a mild citrus odor
Generic Ingredients: Water, aliphatic and terpene hydrocarbons, surfactants, coupling agents

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

Business Contact: 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>Skin sensitization: 1</td>
</tr>
<tr>
<td>Eye irritation: 2A</td>
<td>Flammable liquid: 4</td>
</tr>
</tbody>
</table>

WARNING!
Combustible Liquid.
Causes Skin Irritation.
Causes Serious Eye Irritation.
May Cause an Allergic Skin Reaction.

Precautionary Statements:

**Prevention:**
Keep away from flames and hot surfaces. No smoking. Avoid breathing fumes, vapors, or 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. Contaminated work clothing must not be allowed out of the workplace.

Response:
*In case of fire:* Use dry chemical, carbon dioxide, water spray, water fog, or foam. Do not use solid water stream as this may spread the fire.
*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.

Storage:
Store in a well ventilated place. Keep cool.

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>
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</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-60</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>20-40</td>
</tr>
<tr>
<td>Dipropylene glycol</td>
<td>25265-71-8</td>
<td>5-15</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>5889-27-5</td>
<td>1-10</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 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. In certain sensitive individuals, a skin rash may develop.

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 or a rash occurs: Get medical advice or attention.

Special Treatment / Other
None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties
Classification: 4
Flash Point: 145°F
Autoignition Temperature: Not determined
Lower Flammable Limit: Not determined Upper Flammable Limit: Not determined

Specific Hazards
Combustible liquid. Can form flammable mixtures at or above the flash point. Although the product is combustible, it is water based and water dilutable and will self extinguish with addition of water.

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 and nitrogen 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. 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 in a well ventilated place. Keep cool. 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>
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</thead>
<tbody>
<tr>
<td>D-Limonene (1)</td>
<td>ACGIH</td>
<td>20 ppm</td>
<td>TWA</td>
<td>dsen; A4</td>
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<tr>
<td></td>
<td>NIOSH</td>
<td>100 ppm</td>
<td>TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z1</td>
<td>100 ppm</td>
<td>PEL</td>
<td></td>
</tr>
<tr>
<td>Aliphatic petroleum naphtha</td>
<td>ACGIH</td>
<td>1200 mg/m$^3$</td>
<td>TWA</td>
<td>Appendix H</td>
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<tr>
<td></td>
<td>NIOSH</td>
<td>350 mg/m$^3$</td>
<td>TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z1</td>
<td>1800 mg/m$^3$</td>
<td>C 15 minutes</td>
<td></td>
</tr>
</tbody>
</table>

(1) No OEL has been established for d-limonene. Value given is for turpentine which has same molecular weight and similar structure.

### SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

- **Appearance:** Clear to hazy, yellow-orange viscous liquid
- **Odor:** Mild citrus
- **Odor Threshold:** Not determined
- **pH:** About 9
- **Melting Point / Freezing:** About 32°F
- **Boiling Point / Boiling Point Range:** About 212°F
- **Flash Point:** 145°F TCC
- **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:** Not determined
- **Relative Density:** 1.00
- **Solubility (Water):** Water soluble
- **Partition Coefficient ($K_{ow}$):** Not determined
- **Auto-ignition temperature:** Not determined
- **Decomposition temperature:** Not determined
- **Viscosity:** Not determined (viscous shear thinning liquid)

### 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, bases or oxidizing agents.

**Incompatible Materials**  
Strong acids, bases or oxidizing agents.

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

## 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:** >3,000 mg/kg rabbit (estimated from additivity formula)
- **Inhalation:** no data available
- **Oral:** >3,000 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
d-Limonene may cause skin sensitization.

### Germ Cell Mutagenicity
Not expected to be mutagenic based upon component information and comparison to structurally similar compounds.

### Carcinogenicity
Various studies have shown that d-limonene when fed at very high levels to laboratory animals have resulted in effects on the kidneys, liver, ureter, and bladder. d-Limonene is listed by IARC as Group 3: not classifiable as to its carcinogenicity to humans. d-Limonene is listed as an equivocal tumorigenic agent by RTECS criteria.

### Developmental/Reproductive Toxicity
Not expected to be a developmental or reproductive toxin based upon partial component information and comparison to structurally similar compounds.

### Specific Target Organ Effects - Single Exposure
No data available.

### Specific Target Organ Effects - Repeated or Prolonged Exposure
No data for the product. Various individual components have been tested:
- Dipropylene glycol: NOAEL oral rat 470-530 mg/kg/d
- Linear alcohol ethoxylate: repeat dose 90 day oral sub-chronic NOAEL rat M/F >500 mg/kg/d and 90 day dermal sub-chronic NOAEL rat M/F >125 mg/kg/d
- d-Limonene: Mouse, M/F NOEL 1,650 mg/kg, LOEL 3,300 mg/kg.

### Aspiration Hazard
Although the hydrocarbons in this product pose an aspiration hazard, because of this product’s high viscosity, product not expected to be an aspiration hazard.
SECTION 12: ECOLOGICAL INFORMATION

Product Summary
Product is expected to be toxic to the 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) and comparison to similar products.

Persistence and Degradability
Product components considered readily biodegradable.
In two separate 28 day studies (EPA 796.3100), degradability determined to be 85.4% by DOC, 43.2% by CO₂ evolution and 88.9% by DOC, 39.1% by CO₂ evolution. Minimum inhibitory concentration was less than 3.125% in both studies. Product as a whole should be considered readily biodegradable.

Bioaccumulative Potential
Product 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.: Not applicable, nonhazardous material
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
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 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>
</tr>
</thead>
<tbody>
<tr>
<td>no component is subject to reporting requirements</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), C9-11 alcohol ethoxylate (CAS# 68439-46-3), dipropylene glycol (CAS# 25265-71-8), d-limonene (CAS# 5989-27-5), and capryloamphopropionate (CAS# 68815-55-4).

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? Yes
What is the % by volume of photochemically reactive material? 8
What is the VOC content? 96 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
January 16, 2018

HAZARD RATING SYSTEMS:

<table>
<thead>
<tr>
<th>HMIS</th>
<th>NFPA</th>
<th>KEY</th>
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</thead>
<tbody>
<tr>
<td>HEALTH</td>
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<td>1</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>Slight</td>
</tr>
<tr>
<td>0</td>
<td>Minimal</td>
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</table>

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

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