SAFETY DATA SHEET

1. Product and Company Identification

Product identifier | Pan-Treat (4296-60)
Other means of identification | Not available
Recommended use | Condensate drain pan treatment
Recommended restrictions | None known.
Manufacturer information | Nu-Calgon
2611 Schuetz Road
St. Louis, MO 63043 US
Phone: 314-469-7000 / 800-554-5499
Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier | See above.

2. Hazards Identification

Physical hazards | Not classified.
Health hazards | Acute toxicity, oral Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Environmental hazards | Not classified.
WHMIS 2015 defined hazards | Not classified

Label elements

Signal word | Danger
Hazard statement | Harmful if swallowed. Causes skin irritation. Causes serious eye damage.
Precautionary statement
Prevention | Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
Response | IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). 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 SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
Storage | Store away from incompatible materials.
Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) | None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) | None known
Hazard(s) not otherwise classified (HNOC) | None known.
Supplemental information | None.

3. Composition/Information on Ingredients

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl-C12-18-alkyldimethyl ammonium chlorides</td>
<td>68391-01-5</td>
<td>10-30*</td>
<td></td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>45-70*</td>
<td></td>
</tr>
</tbody>
</table>
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments**
US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

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### 4. First Aid Measures

**Inhalation**
If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

**Skin contact**
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. Specific treatment (see information on this label).

**Eye contact**
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.

**Ingestion**
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

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### 5. Fire Fighting Measures

**Suitable extinguishing media**

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
In the event of fire, cool tanks with water spray.

**Specific methods**
Cool containers exposed to flames with water until well after the fire is out.

**General fire hazards**
No unusual fire or explosion hazards noted.

**Hazardous combustion products**
May include and are not limited to: Oxides of carbon. Hydrogen chloride. Oxides of nitrogen.

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### 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

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### 7. Handling and Storage

**Precautions for safe handling**
Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid contact with eyes, skin and clothing.

**Conditions for safe storage, including any incompatibilities**
Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure Controls/Personal Protection

### Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea (CAS 57-13-6)</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total particulate.</td>
</tr>
</tbody>
</table>

**Biological limit values**
No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  Wear safety glasses with side shields (or goggles) and a face shield.

- **Skin protection**
  - Hand protection
    Impervious gloves. Confirm with reputable supplier first.
  - Other
    As required by employer code. Wear appropriate chemical resistant clothing.

- **Respiratory protection**
  Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

### 9. Physical and Chemical Properties

- **Appearance**
  Crystalline.

- **Physical state**
  Solid.

- **Form**
  Solid. Tablets

- **Color**
  Green

- **Odor**
  Coconut

- **Odor threshold**
  Not available.

- **pH**
  Not available.

- **Melting point/freezing point**
  Not available.

- **Initial boiling point and boiling range**
  Not available.

- **Pour point**
  Not available.

- **Specific gravity**
  0.981

- **Partition coefficient (n-octanol/water)**
  Not available.

- **Flash point**
  Not available.

- **Evaporation rate**
  Not available.

- **Flammability (solid, gas)**
  Not applicable.

- **Upper/lower flammability or explosive limits**
  - Flammability limit - lower (%)
    Not available.
  - Flammability limit - upper (%)
    Not available.
  - Explosive limit - lower (%)
    Not available.
  - Explosive limit - upper (%)
    Not available.

- **Vapor pressure**
  Not available.

- **Vapor density**
  Not available.

- **Relative density**
  Not available.

- **Solubility(ies)**
  100 %

- **Auto-ignition temperature**
  Not available.

- **Decomposition temperature**
  Not available.

- **Viscosity**
  Not available.
10. Stability and Reactivity

Reactivity
Do not mix with other chemicals.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Hydrogen chloride.

11. Toxicological Information

Routes of exposure
Inhalation. Ingestion. Skin contact. Eye contact.

Information on likely routes of exposure

Ingestion
Harmful if swallowed.

Inhalation
Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Skin contact
Not corrosive to skin based on in-vitro test data (OECD Guideline 435 - Corrositex®).

Eye contact
Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics
Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity
Harmful if swallowed.

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Benzyl-C12-18-alkyldimethyl ammonium chlorides (CAS 68391-01-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat 1420 mg/kg, HSDB</td>
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<tr>
<td>Inhalation</td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Not available</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse 150 mg/kg, HSDB</td>
</tr>
<tr>
<td></td>
<td>Rat 300 mg/kg, HSDB</td>
</tr>
<tr>
<td></td>
<td>240 mg/kg, HSDB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Species</th>
<th>Urea (CAS 57-13-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Not available</td>
</tr>
<tr>
<td>Inhalation</td>
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</tr>
<tr>
<td>LC50</td>
<td>Not available</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse 13000 mg/kg, ECHA</td>
</tr>
<tr>
<td></td>
<td>11500 mg/kg, ECHA</td>
</tr>
<tr>
<td></td>
<td>11000 mg/kg, CCOHS</td>
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<tr>
<td></td>
<td>Rat 15000 mg/kg, ECHA</td>
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<tr>
<td></td>
<td>14300 mg/kg</td>
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<tr>
<td></td>
<td>28500 mg/kg</td>
</tr>
<tr>
<td>Sheep</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Not corrosive to skin based on in-vitro test data (OECD Guideline 435 - Corrositex®).

Exposure minutes
Not available.

Erythema value
Not available.

Oedema value
Not available.

Serious eye damage/eye irritation
Causes serious eye damage.

Corneal opacity value
Not available.
Iris lesion value: Not available.
Conjunctival reddening value: Not available.
Conjunctival oedema value: Not available.
Recover days: Not available.
Respiratory or skin sensitization: Not available.
Respiratory sensitization: Not applicable.
Skin sensitization: Not available.
Mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.
Teratogenicity: Not available.
Specific target organ toxicity - single exposure: Not classified.
Specific target organ toxicity - repeated exposure: Not classified.
Aspiration hazard: Not available.
Chronic effects: Prolonged inhalation may be harmful.

12. Ecological Information

Ecotoxicity
Ecotoxicological data
Components
Urea (CAS 57-13-6)
  Crustacea
  Aquatic
  Crustacea
  Fish
Species
  EC50
  LC50
Test Results
  Daphnia
  Water flea (Daphnia magna)
  Giant gourami (Colisa fasciata)
  10000 mg/L, 48 Hours
  3910 mg/L, 48 hours
  5 mg/L, 96 hours
Persistence and degradability: No data is available on the degradability of this product.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Mobility in general: Not available.
Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations: Dispose in accordance with all applicable regulations.
Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification: Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
15. Regulatory Information

### Canadian federal regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Export Control List (CEPA 1999, Schedule 3)**
- Not listed.

**Greenhouse Gases**
- Not listed.

**Precursor Control Regulations**
- Not regulated.

**WHMIS 2015 Exemptions**
- Not applicable

**US federal regulations**
- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  - The chemicals listed in Section 3 are on the TSCA Chemical Substances Inventory.

- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - Not listed.

  - Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

- **Hazard categories**
  - Immediate Hazard - Yes
  - Delayed Hazard - No
  - Fire Hazard - No
  - Pressure Hazard - No
  - Reactivity Hazard - No

- **SARA 302 Extremely hazardous substance**
  - No

- **SARA 311/312 Hazardous chemical**
  - No

- **SARA 313 (TRI reporting)**
  - Not regulated.

**Other federal regulations**

- **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
  - Not regulated.

- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
  - Not regulated.

**US state regulations**

- **See below**

- **US - Minnesota Haz Subs: Listed substance**
  - Urea (CAS 57-13-6) - Listed.

- **US - Texas Effects Screening Levels: Listed substance**
  - Benzyl-C12-18-alkyldimethyl ammonium chlorides (CAS 68391-01-5) - Listed.

- **US. Massachusetts RTK - Substance List**
  - Not regulated.

- **US. New Jersey Worker and Community Right-to-Know Act**
  - Not regulated.

- **US. Pennsylvania Worker and Community Right-to-Know Law**
  - Not listed.

- **US. Rhode Island RTK**
  - Not regulated.
US. California Proposition 65
Not Listed.

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

| LEGEND       | |
|--------------||
| Severe       | 4 |
| Serious      | 3 |
| Moderate     | 2 |
| Slight       | 1 |
| Minimal      | 0 |

LEGEND

- **Severe**: 4
- **Serious**: 3
- **Moderate**: 2
- **Slight**: 1
- **Minimal**: 0

Health / Flammability / Physical Hazard / Personal Protection

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document. The information in the sheet was written based on the best knowledge and experience currently available.

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Prepared by Nu-Calgon Technical Service  Phone: (314) 469-7000