Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product Name HTNN-1, HTNN-2, RL232

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended Use Viscometer and/or density measurement equipment performance verification check standard
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet
Supplier Cannon Instrument Company
2139 High Tech Rd.
State College, PA 16803-1733
TEL: (814) 353-8000; (800) 676-6232
For further information, please contact
E-mail Address No information available

1.4. Emergency telephone number
Emergency Telephone (800) 255-3924 Domestic CHEM-TEL Inc.
Number +1 (813) 248-0585 Overseas CHEM-TEL Inc. (Please Call Collect)
Europe 112

Section 2. Hazards identification

2.1. - Classification of the substance or mixture
REGULATION (EC) No.1272/2008
Not classified

Physical Hazards
None

2.2. Label Elements
Not classified

2.3. Other information
May be irritating to eyes, respiratory system and skin.

Section 3. Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC-No</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>EU - GHS Substance Classification</th>
<th>REACH No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td>-</td>
<td>68037-01-4</td>
<td>70-85</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Highly Refined Mineral Oil (C15-C50)</td>
<td>-</td>
<td>-</td>
<td>15-30</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Diphenylamine</td>
<td>204-539-4</td>
<td>122-39-4</td>
<td>&lt;0.1</td>
<td>STOT RE 2 (H373) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)</td>
<td>No data available</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16

### Section 4. First aid measures

**4.1. Description of first-aid measures**

- **Eye Contact**: Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation persists.
- **Skin Contact**: Wash off with warm water and soap. Get medical attention if symptoms occur.
- **Ingestion**: Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
- **Inhalation**: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.
- **Protection of First-aiders**: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**4.2. Most important symptoms and effects, both acute and delayed**

- **Most Important Symptoms/Effects**: Irritation.

**4.3. Indication of immediate medical attention and special treatment needed**

- **Notes to Physician**: Treat symptomatically.

### Section 5. Fire-fighting measures

**5.1. Extinguishing media**

- **Suitable Extinguishing Media**: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- **Extinguishing media which must not be used for safety reasons**: No information available.

**5.2. Special hazards arising from the substance or mixture**

- **Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**: None in particular.

**5.3. Advice for firefighters**

- **Special protective equipment for fire-fighters**: As in any fire, wear self-contained breathing apparatus and full protective gear.
Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes and clothing. Refer to Section 8 for personal protective equipment.

6.2. Environmental precautions
Prevent further leakage or spillage if safe to do so.

6.3. Methods and materials for containment and cleaning up
Prevent further leakage or spillage if safe to do so.

Dam up. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13). Clean contaminated surface thoroughly.

6.4. Reference to other sections
See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wear personal protective equipment.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities
Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)
Exposure Scenario
No information available.

Other Guidelines
No information available.

Section 8. Exposure controls/personal protection

8.1. Control parameters
Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EU</th>
<th>Austria</th>
<th>Belgium</th>
<th>Cyprus</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td></td>
<td>STEL: 1.4 ppm</td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td>TWA: 5 mg/m³</td>
</tr>
<tr>
<td>122-39-4</td>
<td></td>
<td>STEL: 10 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 0.7 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 5 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Finland</th>
<th>France</th>
<th>Germany</th>
<th>Gibraltar</th>
<th>Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td></td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td>122-39-4</td>
<td></td>
<td>STEL: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td>STEL: 20 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td>Ceiling / Peak: 10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 5 mg/m³</td>
<td>Carc*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin</td>
<td>Skin Repr*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ireland</th>
<th>Italy</th>
<th>Lithuania</th>
<th>Luxembourg</th>
<th>Malta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>122-39-4</td>
<td></td>
<td>STEL: 20 mg/m³</td>
<td>Carc*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>The Netherlands</th>
<th>Norway</th>
<th>Poland</th>
<th>Portugal</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td></td>
<td>TWA: 5 mg/m³</td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 10 mg/m³</td>
</tr>
</tbody>
</table>
**Biological occupational exposure limits**
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level**
No information available.

**Predicted No Effect Concentration (PNEC)**
No information available.

### 8.2. Exposure controls

**Engineering Measures**
Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**
- **Eye Protection**: Safety glasses with side-shields.
- **Skin and Body Protection**: Long sleeved clothing.
- **Hand Protection**: Protective gloves.
- **Respiratory Protection**: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Environmental Exposure Controls**
No information available.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Faint hydrocarbon</td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>Colorless</td>
<td></td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Melting Point/Range</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Boiling Point/Boiling Range</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>&gt; 150 °C</td>
<td>Closed cup</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Flammability Limits in Air</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Relative Density</strong></td>
<td>No data available 0.83-0.84</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>Insoluble in water.</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>Soluble in solvents.</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Decomposition Temperature</strong></td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>65-155 cSt @ 40°C</td>
<td>None known</td>
</tr>
<tr>
<td><strong>Explosive Properties</strong></td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Oxidizing Properties</strong></td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

### 9.2. Other information

**VOC Content (%)**
No information available.
10.1. Reactivity
Not reactive under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid
Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Carbon oxides.

Section 11. Toxicological information

11.1. Information on toxicological effects

Acute Toxicity
Product Information

Inhalation
Inhalation of mist may cause irritation to the respiratory system.

Eye Contact
Contact with eyes may cause irritation.

Skin Contact
May cause skin irritation and/or dermatitis. Repeated or prolonged contact may cause localized dermal effects including contact dermatitis, dry skin, or rash.

Ingestion
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td>1120 mg/kg</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

Respiratory or Skin Sensitization
No information available

Mutagenic Effects
No information available

Carcinogenic Effects
No information available

Reproductive Toxicity
No information available

Developmental Toxicity
No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Aspiration Hazard
No information available.

Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects
Contains no substances known to be hazardous to the environment at concentrations that would be significant.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Decene, homopolymer, hydrogenated</td>
<td></td>
<td>LC50 Rainbow trout: &gt;1000 mg/L (96-hr)</td>
<td>EC50: 190 mg/L (48-hr)</td>
<td></td>
</tr>
<tr>
<td>Diphenylamine (Scenedesmus subspicatus)</td>
<td>EC50 72 h: 1.5 mg/L</td>
<td>LC50 96 h: 3.47 - 4.14 mg/L flow-through (Pimephales promelas)</td>
<td>EC50 = 2.81 mg/L 5 min EC50 = 3.46 mg/L 15 min EC50 = 4.77 mg/L 30 min</td>
<td>EC50 48 h: 1.69 - 2.46 mg/L (Daphnia magna)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
12.3. Bioaccumulative potential

No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenylamine</td>
<td>3.4</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products
Dispose of in accordance with local regulations.

Contaminated Packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Note: The information provided below may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional requirements and mode-specific, material-specific, or quantity-specific shipping requirements.

IMDG/IMO

14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
14.4. Packing Group Description Not applicable.
14.5. Marine Pollutant None
14.6. Special Provisions None
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.

RID

14.1. UN-Number Not regulated.
14.2. Proper Shipping Name Not regulated.
14.3. Hazard Class Not regulated.
14.4. Packing Group Description Not applicable.
14.5. Environmental hazard None
14.6. Special Provisions None

ADR
### Section 15. Regulatory information

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**

<table>
<thead>
<tr>
<th>International Inventories</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>European Union</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
</tbody>
</table>

**Legend**
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- AICS - Australian Inventory of Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances

15.2. **Chemical Safety Assessment**

No information available

### Section 16. Other information

**Key literature references and sources for data**

www.ChemADVISOR.com/

**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet