SAFETY DATA SHEET

Issuing Date  24-Apr-2014   Revision Date  06-Mar-2018   Revision Number  2

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

1.1.  Product identifier
Product Name  HT22, R-200 / R-2200

1.2.  Relevant identified uses of the substance or mixture and uses advised against
Recommended Use  Viscometer and/or density measurement equipment calibration and performance verification reference 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
Aspiration Toxicity  Category 1
Acute Inhalation Toxicity - Dusts and Mists  Category 4

Physical Hazards
None

2.2.  Label Elements

Signal Word  Warning

Hazard Statements
H332 - Harmful if inhaled
H304 - May be fatal if swallowed and enters airways

Precautionary Statements - EU (§28, 1272/2008)
P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P308 + P313 - IF exposed or concerned: Get medical advice/ attention
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

2.3. Other information
May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination
Repeted or prolonged skin contact may cause allergic reactions with susceptible persons
Prolonged skin contact may defat the skin and produce dermatitis

Section 3. Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<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>Residual oils (petroleum), solvent refined</td>
<td>265-101-6</td>
<td>64742-01-4</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined light paraffinic</td>
<td>265-091-3</td>
<td>64741-89-5</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined heavy paraffinic</td>
<td>265-090-8</td>
<td>64741-88-4</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, solvent, dewaxed heavy paraffinic</td>
<td>265-169-7</td>
<td>64742-65-0</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>265-157-1</td>
<td>64742-54-7</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td>265-155-0</td>
<td>64742-52-5</td>
<td>&lt;85</td>
<td>Carc. 1B (H350)</td>
<td>No data available</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy</td>
<td>265-150-3</td>
<td>64742-48-9</td>
<td>&lt;85</td>
<td>Muta. 1B (H340) Carc. 1B (H350) Asp. Tox. 1 (H304)</td>
<td>No data available</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>265-156-6</td>
<td>64742-53-6</td>
<td>&lt;85</td>
<td>Asp. Tox. 1 (H304) Carc. 1B (H350)</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. Obtain medical attention if irritation persists.

Skin Contact
Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. Get medical attention if symptoms occur.

Ingestion
Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Drink plenty of water. 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

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. Use 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
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

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. 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. Keep away from open flames, hot surfaces and sources of ignition.

7.3. Specific end use(s)

Exposure Scenario
Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

<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>Naphtha (petroleum), hydrotreated heavy</td>
<td></td>
<td></td>
<td>TWA: 50 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-48-9</td>
<td></td>
<td></td>
<td>TWA: 300 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ceiling / Peak:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>100 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ceiling / Peak:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>600 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repr*</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>Naphtha (petroleum), hydrotreated heavy</td>
<td></td>
<td></td>
<td>TWA: 300 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-48-9</td>
<td></td>
<td></td>
<td>STEL: 900 mg/m³</td>
<td></td>
<td></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
Personal protection equipment should be chosen according to the CEN standards

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>Physical State</th>
<th>Liquid</th>
<th>Appearance</th>
<th>Pale yellow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Hydrocarbon-like</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>&gt;315 °C</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 190 °C</td>
<td>Open cup</td>
</tr>
</tbody>
</table>
Evaporation rate: No data available
Flammability (solid, gas): No data available
Flammability Limits in Air: No data available
Vapor Pressure: No data available
Vapor Density: No data available
Relative Density: 0.86
Water Solubility: Insoluble in water.
Solubility in other solvents: Soluble in solvents.
Partition coefficient: n-octanol/water: No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: 20 cSt @ 40°C
Explosive Properties: No information available
Oxidizing Properties: No information available

9.2. Other information
VOC Content (%): No information available

Section 10. Stability and reactivity

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
None under normal use.

Section 11. Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Inhalation: Harmful by inhalation. Inhalation of mist may cause irritation to the respiratory system.

Eye Contact: Contact with eyes may cause irritation.

Skin Contact: No known hazard in contact with skin. Prolonged skin contact may defat the skin and produce dermatitis. Prolonged or repeated contact may dry skin and cause irritation.

Ingestion: Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be fatal if swallowed and enters airways.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, solvent-refined heavy paraffinic</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt; 5530 mg/m³ (Rat) 4 h</td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined light paraffinic</td>
<td>&gt; 15 g/kg (Rat)</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>= 2.18 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Residual oils (petroleum), solvent refined</td>
<td>&gt;5000 mg/kg (rat)</td>
<td>&gt;2000 mg/kg (rabbit)</td>
<td>= 2.18 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>
### Respiratory or Skin Sensitization
No information available

### Mutagenic Effects
No information available

### Carcinogenic Effects
The classification listed for the petroleum distillates in this product pertains to those that contain more than 3% DMSO extract as measured by IP 346. The petroleum distillates in this product do not meet that criteria to be classified as carcinogens.

### Reproductive Toxicity
No information available

### Developmental Toxicity
No information available

### STOT - single exposure
No information available

### STOT - repeated exposure
No information available

### Target Organ Effects
Skin. Central nervous system (CNS). Eyes. Respiratory system.

### Aspiration Hazard
No information available.

### Section 12. Ecological information

#### 12.1. Toxicity

**Ecotoxicity Effects**
Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

<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>Residual oils (petroleum), solvent refined</td>
<td>-</td>
<td>&gt; 5000 mg/L: LC50 96 h (Oncorhynchus mykiss)</td>
<td>-</td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined light paraffinic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined heavy paraffinic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy naphthenic</td>
<td>LC50 96 h: = 2200 mg/L (Pimephales promelas)</td>
<td></td>
<td></td>
<td>LC50 96 h: = 2.6 mg/L (Chaetogammarus marinus)</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic</td>
<td>LC50 96 h: &gt; 5000 mg/L (Oncorhynchus mykiss)</td>
<td></td>
<td></td>
<td>EC50 48 h: &gt; 1000 mg/L (Daphnia magna)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability
No information available

#### 12.3. Bioaccumulative potential
No information available.
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.

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### 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.

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### 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**: Not regulated.
- **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**: Not regulated.
- **Description**: Not applicable.
- **14.5. Environmental hazard**: None
- **14.6. Special Provisions**: None

**ADR**

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

**ICAO**
14.1. UN-Number
Not regulated.

14.2. Proper shipping name
Not regulated.

14.3. Hazard Class
Not regulated.

14.4. Packing Group
Not regulated.
Description
Not applicable.

14.5. Environmental hazard
None

None

IATA
14.1. UN-Number
Not regulated.

14.2. Proper Shipping Name
Not regulated.

14.3. Hazard Class
Not regulated.

14.4. Packing Group
Not regulated.
Description
Not applicable.

14.5. Environmental hazard
None

None

Section 15. Regulatory information

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Restricted substance per REACH Annex XVII</th>
<th>Substance subject to authorization per REACH Annex XIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual oils (petroleum), solvent refined - 64742-01-4</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined light paraffinic - 64741-89-5</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, solvent-refined heavy paraffinic - 64741-88-4</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy paraffinic - 64742-54-7</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated heavy naphthenic - 64742-52-5</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
<tr>
<td>Naphtha (petroleum), hydrotreated heavy - 64742-48-9</td>
<td>Use restricted. See item 28.</td>
<td>Use restricted. See item 29.</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light naphthenic - 64742-53-6</td>
<td>Use restricted. See item 28.</td>
<td></td>
</tr>
</tbody>
</table>

International Inventories

- TSCA: Not determined
- European Union: Not determined
- DSL/NDSL: Complies
- PICCS: Not determined
- ENCS: Not determined
- IECSC: Not determined
- AICS: Not determined
- KECL: Not determined

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

Full text of H-Statements referred to under sections 2 and 3
H340 - May cause genetic defects
H350 - May cause cancer
H304 - May be fatal if swallowed and enters airways

Key literature references and sources for data
www.ChemADVISOR.com/

Issuing Date 24-Apr-2014
Revision Date 06-Mar-2018
Revision Note Name change.


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