Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Product name: PureTemp -21  
Product number: 192120200

Recommended use: Thermal energy storage.

Company information: Entropy Solutions, LLC.  
4232 Park Glen Road  
Minneapolis, MN 55416  
952-941-0306

Emergency contact: Call CHEMTREC Day or Night  
1-800-424-9300 (USA)  
+1 703-527-3887 (International)

Section 2 – Hazards Identification

GHS classification: Not a hazardous substance or mixture

GHS label elements, including precautionary statements

Not a hazardous substance or mixture

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Proprietary Component 1</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Proprietary Component 2</td>
</tr>
</tbody>
</table>

PureTemp -21 Variants: PureTemp -21X Purple (192120205, unnucleated)

Section 4 – First Aid Measures

Description of first aid measures

Inhalation: If breathed in, move person to fresh air. If breathing is affected seek medical attention.

Skin contact: Wash immediately with soap and water. Cover irritated skin with an emollient. If irritation persists, get medical attention.

Eye contact: Immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists, get medical attention.
Ingestion:
Do not induce vomiting. Drink large amounts of water.

Most important symptoms and effects, both acute and delayed:
May cause eye irritation.

Indication of any immediate medical attention and special treatment needed:
No data available

Section 5 – Firefighting Measures

Extinguishing media
Suitable: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable: No data available.
Special hazards: Carbon oxides
Advice for firefighters: Wear self-contained breathing apparatus for firefighting, if necessary.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures:
Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Eliminate all ignition sources. For personal protection see section 8.

Environmental precautions:
Prevent further leakage or spillage, if safe to do so. Do not let product enter drains. Discharge into the environment should be avoided.

Methods and materials for containment and clean up:
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal. Keep in suitable, closed containers for disposal.

Section 7 – Handling and Storage

Precautions for safe handling:
Avoid contact with eyes. Wash thoroughly after handling. Material is slowly corrosive to metal.

Conditions for safe storage:
Keep the container tightly closed and in a cool, well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8 – Exposure Controls and Personal Protection

Control parameters:
Contains no substances with occupational exposure limit values.

Engineering controls:
Handle in accordance with good industrial hygiene and safety practices. Use appropriate ventilation.

Personal protective equipment
Eyes/face: Use equipment for eye protection tested and approved under appropriate government standards, such as NIOSH (US) or EN 166 (EU).

Skin: Use impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of the contaminated gloves in an appropriate manner. Wash and dry hands.

Body: Wear impervious clothing.

Respiratory: Respiratory equipment is not required.

General Eye wash fountain and emergency showers are recommended.

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**Section 9 – Physical and Chemical Properties**

Physical state: Liquid/solid.

Appearance: Clear liquid. White solid.

Odor: Musty

Odor threshold: No data available.

pH: No data available.

Melting point: -21 °C (-6 °F)

Boiling point: >100 °C (212 °F)

Flash point: No data available

Evaporation rate: No data available.

Flammability (solid/gas): No data available.

Upper/lower flammability or explosive limits: No data available.

Vapor pressure: 24.5 torr at 25 °C (77 °F)

Vapor density: No data available.

Relative density: 1.1 g/mL at 25 °C (77 °F)

Water solubility: >10,000 mg/L at 20 °C (68 °F)

Partition coefficient: n-octanol/water No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

Explosive properties: No data available.
Oxidizing properties: No data available.

Section 10 – Stability and Reactivity

Reactivity: No data available.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to avoid: No data available.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: No data available.

Section 11 – Toxicological Information

Acute toxicity
Proprietary Component 1
LD50 Oral – Rat: > 90 ml/kg
LC50 Inhalation – Rat: No data available.
LD50 Dermal - Rabbit: No data available.
Proprietary Component 2
3550 mg/kg
> 42 mg/L
> 10 g/kg

Carcinogenicity: None of this product’s components are identified as probable, possible, or confirmed carcinogens by ACGIH, IARC, OSHA, NIOSH, or NTP.

Skin corrosion/irritation: Skin- rabbit. No skin irritation.
Eye irritation: Eyes- rabbit. Slight eye irritation occurred.
Respiratory or skin sensitization: No data available.

Section 12 – Ecological Information

Toxicity
Proprietary Component 2
Fish:
Daphnia and other aquatic invertebrates:
Aquatic algae and cyanobacteria:
LC50 – Lepomis macrochirus – 5840 mg/L – 96 h
LC50 – Daphnia magna – 4136 mg/L – 48 h
EC50 – Nitzchia sp. – 2430 mg/L

Persistence
Biodegradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.

### Section 13 – Disposal Considerations

**Disposal instructions:** All wastes must be handled in accordance with local, state, and federal regulations.

### Section 14 – Transportation Information

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

### Section 15 – Regulatory Information

**SARA Title III:** None of this product’s components are subject to the reporting requirements in SARA Title III, Section 302, Section 311, Section 312, or Section 313.

**State regulations:** None of this product’s components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

**WHMIS IDL:** None of this product’s components are listed in the WHMIS IDL.

### Section 16 – Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. Entropy Solutions, LLC. shall not be held liable for any damage resulting from handling, or from contact, with the specified product. It is the buyer’s responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.