

# Safety Data Sheet

Section 1 – Chemical Product and Company Identification	
Product name: Product number:	PureTemp -37 1093700200
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:	Flammable Liquids (Category 4), H227 Skin irritation (Category 2), H315
GHS label elements, includir	g precautionary statements
Pictogram:	
Signal word:	Warning
Hazard statement(s):	H227, Combustible liquid. H315, Causes skin irritation.
Precautionary statement(s):	<ul> <li>P210, Keep away from heat/sparks/open flames/hot surfaces No smoking.</li> <li>P264, Wash skin thoroughly after handling.</li> <li>P280, Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P302 + P352, IF ON SKIN: Wash with plenty of soap and water.</li> <li>P332 + P313, If skin irritation occurs: Get medical advice/attention.</li> <li>P370 + P378, In case of fire: Use dry sand, dry chemical or alcoholresistant foam for extinction.</li> <li>P403 + P235, Store in well-ventilated place. Keep cool.</li> <li>P501, Dispose of contents/container to an approved waste disposal plant.</li> </ul>

Section 3 – Composition/Information on Ingredients	
CAS #	Component

PureTemp -37 Variants: PureTemp -37X Teal (193700207, unnucleated)

#### Section 4 – First Aid Measures

#### **Description of first aid measures**

Inhalation:	If breathed in, move person into 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:	Get immediate medical attention or advice. Do not induce vomiting.
Most important symptoms and effects, both acute and delayed:	May cause skin dryness and irritation. May cause eye and gastrointestinal irritation.
Indication of any immediate medical attention and special treatment needed:	No data available.

## Section 5 – Firefighting Measures

Extinguishing media	
Suitable:	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.

Personal precautions, protective equipment, and emergency procedures:	Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Eliminate all ignition sources. Evacuate personnel to safe areas. Wear appropriate personal protective equipment. 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. Use clean non-sparking tools to collect absorbed material. Keep in suitable, closed containers for disposal.

## Section 7 – Handling and Storage

Precautions for safe handling:	Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid inhalation of vapor or mist. Keep away from sources of ignition. Take measures to prevent the buildup of electrostatic charge.
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: Engineering controls:	Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practices. Use appropriate ventilation.
Personal protective equipme	<u>nt</u>
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.

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:	-37 °C (-34.4 °F)
Boiling point:	193 °C (379 °F)

Flash point:	82 °C (180 °F)
Evaporation rate:	No data available.
Flammability (solid/gas):	No data available.
Upper/lower flammability or explosive limits:	No data available.
Vapor pressure:	72 Pa at 25 °C (77 °F)
Vapor density:	No data available.
Relative density:	0.877 g/mL at 25 °C (77 °F)
Water solubility:	64.4 mg/L at 20 <sup>0</sup> C (68 <sup>o</sup> F)
Partition coefficient: n- octanol/water	Log Pow: 3.32 at 20 $^{\circ}$ C (68 $^{\circ}$ F)
Auto-ignition temperature:	290 °C (554 °F)
Decomposition temperature:	No data available.
Viscosity:	1.6 mm <sup>2</sup> /sec at 20 <sup>0</sup> C (68 <sup>o</sup> F)
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:	No data available.
Conditions to avoid:	Heat, flames, sparks, extreme temperatures, and direct sunlight.
Incompatible materials:	Strong oxidizing agents, strong acids, strong bases, and strong reducing agents.
Hazardous decomposition products:	No data available.

## Section 11 – Toxicological Information

Acute toxicity	
LD50 Oral – Rat:	> 2,000 mg/kg
LC50 Inhalation – Rat:	> 5 mg/L (4h)
Dermal:	No data available.
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. Irritation occurred.
Eye irritation:	Eyes – rabbit. No eye irritation.
Respiratory or skin sensitation:	No data available.

## Section 12 – Ecological Information

<u>Toxicity</u> Fish:	LC50 – Leuciscus idus – 95 mg/L – 48 h
<u>Persistence</u> Biodegradability:	78%, 28 d – Readily biodegradable
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.