PureTemp®
GLOBAL AUTHORITY ON PHASE CHANGE MATERIAL

# Safety Data Sheet

## Section 1 – Chemical Product and Company Identification

**Product name**: PureTemp -15
**Product number:** PT91500000

**Recommended use:** Thermal energy storage.

**Company information**:
PureTemp LLC
2909 Wayzata Boulevard, Suite 72651
Minneapolis, MN 55405
612-563-2233

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

## Section 2 – Hazards Identification

**GHS classification**:
Acute toxicity (Category 4), H302
Eye Irritation (Category 2), H319

**GHS label elements, including precautionary statements**

**Pictogram:**



**Signal word:** Warning

**Hazard statement(s):**
H302, Harmful if swallowed
H319, Causes serious eye irritation

**Precautionary statement(s):**
P273, Avoid release to the environment
P280, Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313, If eye irritation persists: Get medical advice/attention.
P391, Collect spillage
P403 + P233, Store in well-ventilated place. Keep container tightly closed.
P501, Dispose of contents/container to an approved waste disposal plant

## Section 3 – Composition/Information on Ingredients

| CAS # | Component |
|---|---|
| Trade Secret | Proprietary Component 1 |

| | |
|---|---|
| Trade Secret | Proprietary Component 2 |

**PureTemp -15 Variants:** PureTemp -15X Purple (PT91520050, 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. Seek medical attention.

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

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| **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

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| **Control parameters:** | Proprietary Component 2 |
| **ACGIH:** | 10 mg/m3 TWA (fume)<br>20 mg/m3 STEL (fume) |
| **OSHA:** | 10 mg/m3 TWA<br>20 mg/m3 STEL |
| **NIOSH:** | 10 mg/m3 TWA (fume)<br>20 mg/m3 STEL (fume) |
| **Engineering controls:** | Handle in accordance with good industrial hygiene and safety practices. Use appropriate ventilation. |

**Personal protective equipment**

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|---|---|
| **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

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|---|---|
| **Physical state:** | Liquid/solid. |
| **Appearance:** | Clear liquid. White solid. |
| **Odor:** | None. |
| **Odor threshold:** | No data available. |
| **pH:** | No data available. |
| **Melting point:** | -15 $^{o}$C (5 $^{o}$F) |
| **Boiling point:** | 101 $^{o}$C (214 $^{o}$F) |
| **Flash point:** | No data available |
| **Evaporation rate:** | No data available. |

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| **Flammability (solid/gas):** | No data available. |
| **Upper/lower flammability or explosive limits:** | No data available. |
| **Vapor pressure:** | 717.40 mmHg at 25 ºC (77 ºF) |
| **Vapor density:** | No data available. |
| **Relative density:** | 1.033 g/mL |
| **Water solubility:** | >10,000 mg/L at 20 ºC (68 ºF) |
| **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

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|---|---|
| **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, alkalis, potassium chlorate |
| **Hazardous decomposition products:** | Ammonia, hydrogen chloride |

## Section 11 – Toxicological Information

| **Acute toxicity** | Proprietary Component 1 | Proprietary Component 2 |
|---|---|---|
| **LD50 Oral – Rat:** | > 90 ml/kg | 1410 mg/kg |
| **LC50 Inhalation – Rat:** | No data available. | No data available. |
| **LD50 Dermal - Rabbit:** | No data available. | 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. No skin irritation. |
| **Eye irritation:** | Eyes- rabbit. Eye irritation occurred. (Proprietary Component 2) |

**Respiratory or skin sensitation:** No data available.

## Section 12 – Ecological Information

**Toxicity** Proprietary Component 2

**Fish:** LC50 – Cyprinus carpo – 209 mg/L – 96 h

**Daphnia and other aquatic invertebrates:** LC50 – Daphnia magna – 271 mg/L – 48 h

**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:** One or more of this product's components are subject to the reporting requirements in SARA Title III, Section 302, Section 311, Section 312, and/or Section 313.

**Proprietary Component 2 (Trade Secret)**
CERCLA: 5,000 lb final RQ; 2,270 kg final RQ

**State regulations:** The following components appear on one or more of the following state hazardous substances lists.

| Component | CAS | CA | MA | MN | NJ | PA | RI |
|---|---|---|---|---|---|---|---|
| Proprietary Component 2 | Trade Secret | Yes | Yes | Yes | Yes | Yes | Yes |

**WHMIS IDL:** The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List.

| Component | CAS | Minimum Concentration |
|---|---|---|
| Proprietary Component 2 | Trade Secret | 1% |

**Additional Regulatory Information**

**Component Analysis - Inventory:**

| Component | CAS | TSCA | CAN | EEC |
|---|---|---|---|---|
| Proprietary Component 1 | Trade Secret | Yes | DSL | EINECS |
| Proprietary Component 2 | Trade Secret | Yes | DSL | EINECS |

## 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. PureTemp 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.