

SECTION 1: IDENTIFICATION

Product Identifier

Product form: Liquid Substance @ 25°C
Product Name: **PCM-OM05P**
CAS No: 8002-74-2
Synonyms: Tetradecane

Intended Use of the Product

Use of substance/mixture: Latent Heat Storage, Thermal reservoirs

Name, Address, and Telephone of the responsible Party

Name: RGEES LLC
Address: 170 Bradley Branch Rd Ste 7
Arden, NC 28704
Phone: +1.828.708.7178
Email: operations@rgees.com

Emergency Telephone Number

+1.828.708.7016 for Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS): Acute Toxicity-Oral 05, Eye Irritation-2B

Labeling

Hazard Pictograms (GHS): No Hazard Pictograms (GHS) required
Signal Word (GHS): Warning
Hazard Statement: H303 - May be harmful if swallowed
Precautionary Statements (GHS): P210 - Keep away from heat/sparks/open flames/hot surfaces - No smoking
P221 - Take any precaution to avoid mixing with combustibles
P402 + P404 - Store in a dry place in a closed container
P312 - Get medical advice/attention if you feel unwell
Dispose of contents/container in accordance with local/regional/ national and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: No additional information available
Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

Substance

Name	Product Identifier	%	Classification (GHS)
savENRG® PCM-OM05P	-	100	Acute Toxicity-Oral 05

Full text of H-phrases: see section 16

Mixture

Composition			
Chemical Name	Identifiers	%	Classifications According to Regulations/Directives
Mixture of Organic Chemicals	CAS: 8002-74-2 EC Number: Not available	0-100	EU DSD/DPD: Not available EU CPL: Not available OSHA HCS 2012: Not available

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

First-aid Measures General:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible). Do not rub affected area. Get immediate medical attention.
First-aid Measures After Inhalation:	Expose to fresh air if affects occur. Seek medical attention immediately.
First-aid Measures After Skin Contact:	Wash off in flowing water or shower. Remove contaminated cloth immediately. Seek medical attention.
First-aid Measures After Eye Contact:	Irrigate with flowing water immediately and continuously for 15 minutes. Seek medical attention.
First-aid Measures After Ingestion:	Wash the mouth with plenty of water. Call a physician. Never give anything by mouth or attempt to induce vomiting in an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms/Injuries after Inhalation:	May cause irritation to respiratory tract.
Symptoms/Injuries after Skin Contact:	May cause irritation. May cause severe irritation, if skin is damp and/or abraded, or the material is confined to skin.
Symptoms/Injuries After Eye Contact:	May cause moderate to severe irritation, including corneal injury.
Symptoms/Injuries After Ingestion:	Ingestion may be harmful and may cause gastrointestinal irritation.
Chronic Symptoms:	None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Use extinguishing media appropriate for surrounding fire. Use Foam, dry chemicals, CO2 as extinguishing media. Summon fire department immediately.
Unsuitable Extinguishing Media:	Avoid inert adsorbents.

Special Hazards Arising From the Substance or Mixture

Fire Hazard:	When heated to decomposition may produce irritant fumes. Remove from vicinity containers NOT involved in fire.
Explosion Hazard:	Under explosion, the material will be flammable

Reactivity:	Avoid contact with oxidizing materials.
Advice for Firefighters	
Precautionary Measures Fire:	Exercise caution when fighting any chemical fire.
Firefighting Instructions:	Shut off source of fuel if possible, and allow fire to burn out. Remove containers from fire area if this can be done without risk. Fight fire from safe distance and protected location.
Protection during Firefighting:	Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Use water spray or fog for cooling exposed containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures:	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not breathe gas. Avoid contact with the skin and the eyes.
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For Non-emergency Personnel

Protective Equipment:	Use appropriate personal protection equipment (PPE).
Emergency Procedures:	Evacuate unnecessary personnel. Keep upwind.

For Emergency Responders

Protective Equipment:	Equip cleanup crew with proper protection.
Emergency Procedures:	Eliminate ignition sources. Ventilate area.

Environmental Precautions

Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment:	Stop leak if safe to do so.
Methods for Cleaning Up:	Stop the source of the release, if safe to do so. Ventilate and test area before entering. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed:	Risk of explosion if heated under confinement. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use only non-sparking tools.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety procedures. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures:	Check material compatibility of the container that will be used for encapsulating the PCM. The container must be closed-sealed system.
Storage Conditions:	Protect container from physical shock. Store in a cool, dry and well-ventilated place. Keep containers tightly closed. Do not store near heat, flame, or other potential ignition sources. Do not store in unlabeled containers. Ground all equipment containing this material. All electrical equipment in areas where this material is stored or handled must meet all applicable requirements of the NFPA's National Electrical Code (NEC). Store and transport in accordance with all applicable laws.
Specific End Use(s):	Latent Heat Storage

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control Parameters

USA ACGIH	ACGIH TWA (ppm)	0
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Exposure Controls

Appropriate Engineering Controls: Use explosion-proof equipment. Proper grounding procedures to avoid static electricity should be followed. Gas detectors should be used when flammable gases/vapors may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing. Self-contained breathing apparatus.



Materials for Protective Clothing: Wear fire/flamm resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical goggles or safety glasses

Skin and Body Protection: Wear suitable protective clothing

Respiratory Protection: Use an approved air-purifying respirator.

Thermal Hazard Protection: If material is cold, wear thermally resistant protective gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid @ 25°C

Appearance: Clear liquid at room temperature

Odor: Waxy Odor

Odor Threshold: No data available

pH: No data available

Relative Evaporation Rate: No data available

Melting Point: 6°C

Freezing: 5°C

Boiling Point: No data available

Flash Point: 200°C

Decomposition Temperature: No data available

Flammability (solid, liquid, gas): Not classified

Vapor Pressure: No data available

Relative Vapor Density at 20°C: No data available

Relative Density: No data available

Liquid Density: 763 kg/m³

Solid Density: 820 kg/m³

Specific Gravity: No data available

Solubility: Insoluble in water, Soluble in organic solvents

Partition Coefficient: No data available

Viscosity: No data available

Lower Flammable Limit: Not Applicable

Higher Flammable Limit: Not Applicable

Latent Heat: 215 kJ/kg

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Reacts with oxidizers: (increased) risk of fire.
Chemical Stability:	Stable under recommended handling and storage conditions (see section 7).
Possibility of Hazardous Reactions:	May explode if heated. Hazardous polymerization will not occur.
Conditions to Avoid:	Incompatible materials, Sparks, heat, open flame and other sources of ignition.
Incompatible Materials:	Strong oxidizers.
Hazardous Decomposition Products:	Carbon oxides (CO, CO ₂)

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:	Not classified
Skin Corrosion/Irritation:	Not classified
Serious Eye Damage/Irritation:	Not classified
Respiratory or Skin Sensitization:	Not classified
Germ Cell Mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive Toxicity:	Not classified
Specific Target Organ Toxicity (Single Exposure):	Not classified
Specific Target Organ Toxicity (Repeated Exposure):	Not classified
Aspiration Hazard:	Not classified
Symptoms/Injuries After Inhalation:	May cause irritation to respiratory tract
Symptoms/Injuries After Skin Contact:	None expected under normal conditions of use.
Symptoms/Injuries After Eye Contact:	None expected under normal conditions of use.
Symptoms/Injuries After Ingestion:	None expected under normal conditions of use.
Chronic Symptoms:	None expected under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:	No additional information available
Persistence and Degradability:	No additional information available
Bio accumulative Potential:	No additional information available
Mobility in Soil:	No additional information available
Other Adverse Effects:	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations:	Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
Additional Information:	Handle empty containers with care. Recycle the material as far as possible. For further information, refer to section 16.

SECTION 14: TRANSPORTATION INFORMATION

DOT:	Not Classified as Dangerous Goods
IMDG:	Not Classified as Dangerous Goods
IATA:	Not Classified as Dangerous Goods
Proper Shipping Name:	Mixture of paraffins

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

OSHA Hazards HCS 2012: Not Available
 SARA Section 311/312 Hazard Class: Immediate health/Fire hazard
 TSCA Inventory: Listed

US State Regulations

U.S. – Delaware: Accidental Release Prevention Regulations - Sufficient Quantities, Pollutant Discharge Requirements - Reportable Quantities, Volatile Organic Compounds Exempt from Requirements

U.S. – Massachusetts: Right To Know List, Volatile Organic Compounds Exempt From Requirements

U.S. – Minnesota: Hazardous Substance List

U.S. – New Jersey: Discharge Prevention - List of Hazardous Substances, Environmental Hazardous Substances List, Excluded Volatile Organic Compounds, Right to Know Hazardous Substance List, Special Health Hazards Substances List, TCPA - Extraordinarily Hazardous Substances (EHS)

U.S. – Ohio: Accidental Release Prevention - Threshold Quantities

U.S. – Oregon: Permissible Exposure Limits - TWAs

U.S. – Pennsylvania: RTK (Right to Know) List

U.S. – Texas: Effects Screening Levels - Long Term, Effects Screening Levels - Short Term

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF LAST REVISION

Revision Date	06/10/2019 525R0
Other Information	This document has been prepared in accordance with the SDS requirements of the GHS and OSHA Hazard Communication Standard 29 CFR 1910.1200
GHS Full Text Phrases:	
H303	May be harmful if swallowed