

SAFETY DATA SHEET

Section 1: Identification

Product Name: THERMAL SHIELD

Other Name/Use and Restrictions: Patented, non-toxic, non-corrosive, 100% organic, biodegradable concentrate fire-suppressing agent designed to extinguish Lithium Ion fires.

Company: Redline Fire Solutions
P.O. Box 4058
Pahrump, NV. 89041

In emergency call 911.

For information about this SDS, contact phone#: (909) 919-9115

Section 2: Hazard(s) Identification

Hazard Classification: This chemical mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1919.1200)

Signal Word(s): Not a hazardous substance or mixture

Hazard Statements: Not a hazardous substance or mixture

Description of other hazards: None Known

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.*
Phenoxyethanol	Ethylene Glycol Monophenyl Ether	122-99-6	<1%
Bio-based Surfactant Blend	Proprietary	Proprietary	0.5%-30 %
Bio-based Ingredients	Proprietary	Proprietary	1-30%

*Exact Concentration withheld as trade secret
All Ingredients are listed on EPA Safer Choice List

Section 4: First-Aid Measures

After skin contact: Generally, the product does not irritate the skin. The product will remove oils from skin similar to common soap.

After eye contact: Rinse opened eye for several minutes under running water

After inhalation: Supply fresh air; consult physician in case of complaints

After swallowing: If symptoms persist consult physician

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: This product is used as an extinguishing agent and, therefore, is not a problem when trying to control a fire. Use extinguishing agent appropriate to other materials involved.

Special protective equipment for firefighters: No special measures required for the product, wear protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

Flammable Limits: Non-Flammable

Section 6: Accidental Release Measures

Personal precautions: None required.

Measures for environmental protection: Dilute with plenty of water.

Spill or Leak Procedures: Rinse the affected area with water. Product is water soluble and foam layer dissipates without leaving residue. Product biodegrades rapidly.

Waste Disposal Method: Dispose as non-hazardous waste in accordance with local regulations.

Section 7: Handling and Storage

Handling: Suppressit is neutral. It will remove oil from the skin and may not irritate the eyes if sprayed directly into them. When handling bulk concentrate, no special precaution is required, skin contact is ok.

Storage: Store in closed containers at temperatures from 32°F to 120°F to prevent evaporation and deterioration. Freezing will not damage the material as long as the container remains intact.

Other Precautions: Although components have low hazard levels, the product will remove oils like the common soap from the skin.

Section 8: Exposure Controls/Personal Protection

Chemical Name	OSHA PEL	OSHA PEL (ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
No hazardous components in product				

General protective and hygienic measures: Normal work wear

Breathing equipment: None required

Protection of hands: None required; use chemical-resistant gloves if there is anticipation of prolonged skin contact.

Eye protection: safety glasses as needed to prevent reasonable probability of eye contact.

Ventilation: Under ordinary conditions of use for its intended purpose, no special ventilation is required.

Potential routes of exposure/potential health effects

Skin: Yes, can cause skin irritation similar to soap

Eye: Yes, causes eye irritation similar to soap

Inhalation: No relevant studies identified

Ingestion: No relevant studies identified

Carcinogenic effects: Not considered carcinogenic by NTP, IARC, and OSHA.

Mutagenic effects: No relevant studies identified

Reproductive toxicity: No relevant studies identified

Section 9: Physical and Chemical Properties

Appearance: Clear liquid

Odor: Mild, pleasant fresh smell

Odor threshold: No data available

pH: Concentrate is 7.6

Melting point/melting range: No data available

Boiling point/boiling range: 212 degrees

Flash point: Negligible

Evaporation rate: No data available

Flammability: Not applicable

Upper/lower flammability or explosive limits: Not applicable

Auto ignition temperature: Not applicable

Danger of explosion: Not applicable

Viscosity: <300 Cps @ 20 degrees C

Specific gravity: 1.08 @ 60 F

Solubility in/Miscibility with water: 100% soluble, same as water

Dispersant Capability: Low, Treated oils are not dispersed in water

Section 10: Stability and Reactivity

Reactivity: None known, based on information available

Chemical stability: Stable under normal conditions

Conditions to avoid: Contact with incompatible materials

Incompatible materials: Not expected

Hazardous decomposition products: Carbon Oxides

Hazardous Polymerization: Not expected to occur

Section 11: Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethylene glycol monophenyl ether	1850 mg/kg (Rat)	5 mL/kg (Rabbit)	>0.057 mg/L (Rat) 8Hr

Aquatic Toxicity	96 hr acute toxicity Freshwater Alga (Selenastrum Capricornutum)	96 hr acute toxicity Juvenile Rainbow Trout (Oncorhynchus Mykiss)
Thermal Shield	>750 mg/kg	

Sensitization: No relevant studies identified
Target organs: No relevant studies identified

Section 12: Ecological Information

Product Information

Ecotoxicity: No relevant studies identified
Mobility: No relevant studies identified
Biodegradation: Product is 100% biodegradable in an active environment within 21 days
Bioaccumulation: No relevant studies identified

Section 13: Disposal Considerations

This product, as sold, is not a RCRA-listed waste or hazardous waste as characterized by 40 CFR 261.
Dispose as non-hazardous waste in accordance with local regulations.

Section 14: Transport Information

DOT regulations: Not regulated

- **Hazard class:** Not Applicable
- **Land transport ADR/RID (cross-border):** Not Applicable
- **ADR/RID class:** Not Applicable
- **Maritime transport IMDG:** Not Applicable
- **Air transport ICAO-TI and IATA-DGR: Not Applicable**
- **ICAO/IATA Class:** Not Applicable

Section 15: Regulatory Information

US Federal Regulations

SARA Section 355 (extremely hazardous substances): None
SARA Section 311/312/313 (specific toxic chemical listings): None **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs):** None **TSCA (Toxic Substances Control Act):** None

Section 16: Other Information

SDS date of preparation/update: January 10,2023

