



THERMAL LABS

SAFETY DATA SHEET

FROST SPORT COOLING SPRAY

PRELIMINARY TECHNICAL REVIEW DRAFT

This SDS has been prepared from the current FROST formulation information available to Thermal Labs. It is intentionally conservative and is not ready for external distribution or transport classification until the exact Alcohol Denat. composition, mint fragrance SDS, and finished-product closed-cup flash point are confirmed. Final review by a qualified hazard-communication/SDS professional is recommended before release.

SECTION 1: IDENTIFICATION

Product identifier	FROST Sport Cooling Spray
Product form	Liquid in non-pressurized trigger-spray bottle
Recommended use	Personal sport cooling spray for external use.
Uses advised against	Do not ingest. Do not spray into eyes, face, mucous membranes, or onto broken/irritated skin. Do not use near ignition sources.
Supplier	Thermal Labs, LLC
Address	1121 Via Cordova, Oceanside, CA 92057, United States
Telephone	+1 (760) 822-7223
Email	jesse@thermallabs.com
Website	https://thermallabs.co
Emergency telephone	+1 (760) 822-7223 (company contact; 24-hour emergency-response availability has not been confirmed for this draft).
SDS document no.	FROST-SDS-001 Revision 0.1 Issue date: August 14, 2026

SECTION 2: HAZARD(S) IDENTIFICATION

Provisional GHS/OSHA classification for interim handling:

Hazard class	Provisional classification	Basis / status
Flammable liquids	Category 2 - CONSERVATIVE INTERIM CLASSIFICATION	Finished-product flash point has not yet been measured. Because the formula contains 50% Alcohol Denat. input and may fall near the 23 C OSHA Category 2/3 boundary, use Category 2 controls until validated.
Serious eye damage / eye irritation	Category 2A - Provisional	Ethanol-containing liquid and menthol-containing formula; final confirmation depends on raw-material SDS review.



Flame



Exclamation mark

Signal word: DANGER

Hazard statements:

- Highly flammable liquid and vapor.
- Causes serious eye irritation.

Precautionary statements

- Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
- Keep container tightly closed. Use only with adequate ventilation.
- Avoid breathing concentrated vapor or spray mist. Avoid contact with eyes.
- Wear eye protection and suitable gloves during bulk manufacturing, filling, spill cleanup, or other occupational handling where splashing may occur.
- IF IN EYES: Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
- In case of fire: Use alcohol-resistant foam, dry chemical, carbon dioxide, or water fog as appropriate.



- Store in a cool, well-ventilated place away from ignition sources. Dispose of contents/container in accordance with applicable regulations.

Other hazards: Vapors can travel to an ignition source and flash back. Repeated or prolonged skin contact may cause dryness or irritation. Product is not a pressurized aerosol.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

FORMULATION DATA LIMITATION

The current formula uses Alcohol Denat. at 50.0% of the finished formula, but the supplier SDS identifying the exact ethanol concentration and denaturant chemistry was not available for this draft. OSHA Section 3 disclosure and final hazard classification must be updated from the actual raw-material SDS.

Component	CAS No.	Concentration / formulation basis	Notes
Alcohol Denat. (ethanol-based mixture)	Mixture; ethanol component CAS 64-17-5	50.0% formula input	Exact ethanol percentage and denaturant(s) pending supplier SDS.
L-Menthol	2216-51-5	0.30%	Irritating in concentrated form; present at low concentration in finished formula.
Other formulation components	Various	Balance	Water, menthyl lactate, triethyl citrate, polysorbate 20, green tea extract, and mint fragrance. Final disclosure review depends on supplier SDSs and applicable concentration cutoffs.

Formulation basis used for this draft: 50.00% Alcohol Denat.; 47.45% water; 0.75% menthyl lactate; 0.75% triethyl citrate; 0.55% polysorbate 20; 0.30% L-menthol; 0.10% green tea extract; 0.10% mint fragrance. This line is included for internal technical review and may be removed from a released public SDS if Section 3 is finalized using OSHA-compliant hazardous-ingredient disclosure.

SECTION 4: FIRST-AID MEASURES

Eye contact	Immediately rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists or is severe.
Skin contact	For unintended or excessive exposure, rinse skin with water. Remove contaminated clothing. If burning, redness, or irritation develops, discontinue use and seek medical advice if symptoms persist.
Inhalation	Move person to fresh air. Keep at rest in a position comfortable for breathing. Seek medical attention if dizziness, headache, respiratory irritation, or other symptoms persist.
Ingestion	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Contact a poison center or healthcare professional for significant ingestion or if symptoms occur.
Most important symptoms/effects	Eye stinging, redness, and watering. Skin dryness or irritation with repeated/prolonged exposure. High vapor concentrations may cause headache, dizziness, or drowsiness.
Immediate medical attention	Treat symptomatically. No specific antidote known for the mixture.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Alcohol-resistant foam, dry chemical, carbon dioxide (CO ₂), or water fog/spray. Use water spray to cool exposed containers.
Unsuitable media	Avoid a direct high-pressure water stream that may spread burning liquid.
Specific hazards	Flammable liquid and vapor. Vapors may accumulate in low areas, travel to an ignition source, and flash back. Closed containers exposed to heat may build pressure.
Hazardous combustion products	Carbon monoxide, carbon dioxide, and irritating smoke/fumes may be produced during combustion.
Firefighter protection	Wear full protective equipment and positive-pressure self-contained breathing apparatus (SCBA). Approach fire from upwind when practical.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

- Remove all ignition sources and prohibit smoking, flames, and spark-producing equipment in the spill area.
- Ventilate the area. Avoid breathing concentrated vapors or spray mist. Use appropriate PPE for the scale of the spill.
- Stop the leak if this can be done safely. Prevent large quantities from entering drains, sewers, surface water, or soil.
- Absorb with inert, non-combustible material such as sand, vermiculite, or commercial absorbent. Collect in a suitable closed container for disposal.
- Use non-sparking tools and equipment appropriate for flammable liquids during larger spill response.

SECTION 7: HANDLING AND STORAGE**Precautions for safe handling**

- Keep away from heat, sparks, flame, hot surfaces, and other ignition sources. No smoking.
- Avoid eye contact and unnecessary inhalation of concentrated vapor/mist. Do not ingest.
- Do not spray directly toward the face. Avoid broken or irritated skin and discontinue use if persistent burning occurs.
- Use good industrial hygiene practices during manufacturing/filling. Bond/ground bulk transfer equipment as required by the process and local fire code.

Conditions for safe storage

- Store tightly closed in a cool, dry, well-ventilated area away from direct sunlight and ignition sources.
- Keep away from strong oxidizing agents and incompatible materials.
- Protect from excessive heat. Keep out of reach of children.
- Storage/fire-code classification should be confirmed after finished-product flash-point testing.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Substance	OSHA PEL	Other limits
Ethanol (CAS 64-17-5)	1000 ppm (1900 mg/m ³), 8-hour TWA	Use current supplier SDS and employer exposure-control program for any additional limits.
L-Menthol	No OSHA PEL established	Consult supplier SDS for occupational recommendations.
Engineering controls	General room ventilation is normally adequate for consumer-scale use. Provide local exhaust or enhanced ventilation for bulk mixing/filling where vapor concentrations may build.	
Eye/face protection	Consumer intended use: avoid eye contact. Occupational/bulk handling: safety glasses with side shields; chemical splash goggles where splashing is possible.	
Skin protection	Consumer intended use: no special PPE under normal use. Occupational/bulk handling: chemical-resistant gloves such as nitrile for prolonged contact, filling, or cleanup.	
Respiratory protection	Not normally required for intended use with adequate ventilation. If occupational exposure limits could be exceeded, use NIOSH-approved respiratory protection selected under a compliant respiratory-protection program.	
Hygiene measures	Wash hands after bulk handling and before eating, drinking, or smoking. Keep away from food and beverages during manufacturing/filling operations.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value / status
Physical state	Liquid
Appearance	Clear liquid; batch records indicate clear/no sediment during manufacture.
Odor	Mint / alcohol-like
Odor threshold	Not determined
pH	Not determined



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Property	Value / status
Melting/freezing point	Not determined
Initial boiling point/range	Not determined for finished product
Flash point	NOT YET DETERMINED for finished product. Expected to be near ambient temperature because of ethanol content. Until tested, use interim controls equivalent to a flash point below 23 C (73 F).
Evaporation rate	Not determined
Flammability	Flammable liquid/vapor - provisional
Lower/upper explosive limits	Not determined for mixture
Vapor pressure	Not determined
Vapor density	Not determined
Relative density	Not determined
Solubility in water	Miscible/dispersible based on formulation
Partition coefficient	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Viscosity	Low-viscosity sprayable liquid; numerical value not determined
VOC content	Not determined

Flash-point testing should use an accepted closed-cup method appropriate for the product (for example, an OSHA/GHS-recognized ASTM closed-cup method) and the measured result should be inserted here before release.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No dangerous reaction expected under normal conditions of use and storage.
Chemical stability	Stable under recommended storage conditions.
Hazardous reactions	No hazardous polymerization expected. Vapors may ignite in the presence of an ignition source.
Conditions to avoid	Heat, sparks, open flames, hot surfaces, static discharge, and prolonged excessive heat.
Incompatible materials	Strong oxidizing agents and other materials incompatible with alcohol-containing mixtures.
Hazardous decomposition	Carbon monoxide, carbon dioxide, smoke, and irritating fumes during combustion or thermal decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure	Eye contact, skin contact, inhalation of vapor/mist, and accidental ingestion.
Acute toxicity	Finished mixture has not been tested. Based on currently known formulation information, it is not provisionally classified for acute toxicity; final confirmation requires review of the exact denaturant and fragrance composition.
Skin corrosion/irritation	Not provisionally classified as a skin irritant. Repeated or prolonged contact may cause dryness, stinging, or irritation, particularly on sensitive or compromised skin.
Eye damage/irritation	Provisional Eye Irritation Category 2A. Direct eye exposure may cause significant stinging, redness, and tearing.
Respiratory/skin sensitization	Not determined for the finished mixture. Fragrance supplier SDS must be reviewed for sensitizing constituents before final classification.



Germ cell mutagenicity	No mixture data available. No provisional classification assigned based on currently reviewed components.
Carcinogenicity	No mixture classification assigned in this draft. Final determination requires review of all raw-material SDSs, including denaturants and fragrance constituents.
Reproductive toxicity	No mixture classification assigned in this draft; final raw-material review required.
STOT - single exposure	High concentrations of alcohol vapor may cause headache, dizziness, or drowsiness. No final mixture classification assigned.
STOT - repeated exposure	No mixture data available; no provisional classification assigned.
Aspiration hazard	Not expected to meet aspiration-hazard criteria based on current formulation information; final review pending.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Finished mixture has not been tested. No final aquatic-hazard classification has been assigned.
Persistence/degradability	No mixture data available.
Bioaccumulative potential	No mixture data available.
Mobility in soil	No mixture data available.
Other adverse effects	Avoid uncontrolled bulk release to drains, surface water, or soil. Small consumer-use quantities are not expected to present the same environmental risk as a bulk spill.

SECTION 13: DISPOSAL CONSIDERATIONS

- Dispose of unused product, absorbents, and contaminated packaging in accordance with federal, state, and local requirements.
- Do not discharge bulk quantities to drains or waterways.
- Because the finished product flash point has not yet been measured, waste classification (including potential ignitability) must be evaluated before disposing of bulk or off-specification product.
- Empty retail containers should be handled according to local disposal/recycling requirements after they are fully emptied and free of recoverable liquid.

SECTION 14: TRANSPORT INFORMATION

TRANSPORT CLASSIFICATION IS NOT FINAL

Do not use this draft SDS as a shipping declaration. The exact denatured-alcohol composition and finished-product flash point are required to confirm the proper shipping name, packing group, limited-quantity eligibility, and mode-specific requirements.

Transport element	Provisional information
UN number	Likely UN1170, subject to final classification
UN proper shipping name	Likely ETHANOL SOLUTION, subject to final composition/flash-point confirmation
Hazard class	Likely Class 3 (flammable liquid)
Packing group	NOT DETERMINED. Depends on measured flash point/initial boiling point and final composition.
Marine pollutant	Not determined / not expected based on currently known formulation; verify final ingredients.
Special precautions	Keep away from heat/ignition. Shipper is responsible for mode-specific DOT/IATA/IMDG classification, packaging, marking, labeling, and documentation.



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SECTION 15: REGULATORY INFORMATION

U.S. OSHA HazCom	This draft treats the product as a hazardous chemical because of provisional flammability and eye-irritation classifications. Final SDS must be completed in the 16-section OSHA/GHS format using verified composition and hazard data.
TSCA / inventory status	Not evaluated in this draft; confirm supplier regulatory statements for all raw materials.
SARA / CERCLA	Not fully evaluated. Confirm reportable constituents and thresholds after exact Alcohol Denat. and fragrance composition are known.
California Proposition 65	Not determined in this draft. Review exact denaturants, fragrance constituents, and supplier regulatory disclosures before release.
State / local requirements	Fire-code storage, VOC, consumer-product, and workplace requirements may vary by jurisdiction and should be evaluated for the final product and distribution channels.

SECTION 16: OTHER INFORMATION

Revision	0.1 - Preliminary technical review draft
Issue date	August 14, 2026
Prepared for	Thermal Labs, LLC - FROST Sport Cooling Spray
Primary basis	Current FROST formulation information; Thermal Labs production/batch information; OSHA Hazard Communication Standard framework; supplier/component hazard information currently available; user-supplied Ecolab SDS used as a format/reference example.
Conservative assumptions	Until finished-product flash point is measured, interim handling uses controls consistent with Flammable Liquid Category 2. Eye irritation is provisionally classified Category 2A.

Items required before issuing a final external SDS

- Obtain and review the exact Alcohol Denat. supplier SDS, including ethanol concentration, Specially Denatured Alcohol (SDA) formula if applicable, denaturants, CAS numbers, and regulatory listings.
- Obtain and review the mint fragrance supplier SDS and allergen/sensitizer composition relevant to GHS classification.
- Confirm supplier SDSs for menthyl lactate, triethyl citrate, polysorbate 20, menthol, and botanical extract.
- Measure the finished-product flash point using an appropriate closed-cup method; use the result to finalize OSHA flammable-liquid category and DOT/IATA/IMDG transport classification.
- Confirm or measure key Section 9 properties where commercially necessary (density/specific gravity, pH, boiling range, and other available values).
- Confirm a suitable emergency telephone number and hours of availability for Section 1.
- Perform final U.S. federal/state regulatory review and verify any VOC, consumer-product, workplace, fire-code, or California requirements applicable to intended sale and use.
- Have the released SDS reviewed/approved by a qualified hazard-communication or SDS authoring professional before external distribution.

Key regulatory references used for this draft

- OSHA 29 CFR 1910.1200 - Hazard Communication Standard and Appendices A-D (classification, label elements, and SDS content).
- U.S. DOT hazardous materials framework for Class 3 flammable liquids and ethanol solutions; final classification remains dependent on verified product properties.
- Ecolab Instant Hand Sanitizer Gel SDS (user-provided example) - used as a structural and presentation reference only, not as a substitute for FROST product data.

DISCLAIMER

The information in this preliminary document is based on data believed to be relevant at the time of preparation. Because critical raw-material identity and finished-product test data remain outstanding, no warranty is made that this draft is complete or suitable for regulatory distribution, workplace reliance, or transportation documentation. The final SDS must accurately reflect the composition and hazards of the commercial product as manufactured.