

# Houghton Chemical Corporation

## Safety Data Sheet

### SAFE-T-THERM® LC 25



Section 1 - Identification			
Product Name	SAFE-T-THERM® LC 25		
Manufacturer Address	Houghton Chemical Corporation 52 Cambridge Street, Allston, MA 02134 1-617-254-1010 or 1-800-777-2466		
Emergency Telephone	<b>CHEMTREC: 1-800-424-9300</b>		
Chemical Name & Synonyms	Inhibited Propylene Glycol Solution		
Chemical Family	Propylene Glycol Mixture		
Recommended Use	Heat Transfer Fluid, Single-Phase Liquid Coolant		
Restrictions on Use	Further dilution is not recommended for this product.		
Section 2 – Hazard(s) Identification			
Hazard Classification	Not Applicable		
Signal Word	Not Applicable		
Hazard Statement	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of this product.		
Pictogram Description	Not Applicable		
Precautionary Statement	<p>Do not get in eyes, on skin, or on clothing. Do not take internally. Avoid breathing vapor. Avoid release to the environment.</p> <p>Do not leave container open. Do not store in unlabeled containers. Do not eat, drink or smoke when using this product.</p> <p>Wear eye protection &amp; protective gloves.</p> <p>Store tightly closed in a cool, dry, well-ventilated place.</p> <p>Loosen bung cautiously to relieve any pressure. Never use pressure to empty.</p> <p>IF SWALLOWED: Do NOT induce vomiting. Get medical attention if you feel unwell.</p> <p>IF IN EYES: Flush eyes with plenty of water for at least 15 minutes.</p> <p>IF eye irritation persists: get medical attention.</p> <p>IF ON SKIN: Take off contaminated clothing. Wash with soap and plenty of water. Wash contaminated clothing before reuse.</p> <p>FOR LEAKS AND SPILLS: Eliminate all ignition sources. Stop leak if present and safe to do so. Contain spill. Collect spillage &amp; absorb with inert material. Store collected material in approved containers for proper disposal or recovery.</p> <p>IN CASE OF FIRE: Use water, water spray, water fog, alcohol-resistant foam, dry chemical, sand or carbon dioxide to extinguish product. Wear protective gloves, eye and face equipment. Store in a cool, dry and well-ventilated location. Avoid release to the environment.</p>		
Any other Hazard not otherwise classified	Not Applicable		
Section 3 – Composition and Information on Ingredients			
Chemical Name	Common name and synonyms	CAS #	% by weight
Propylene Glycol	1,2 - Propanediol	57-55-6	25%
Deionized Water	N/A	7732-18-5	72.0%
Inhibitors & Dye	N/A	Proprietary	3.0%
The identity and specific concentration of any ingredient(s) marked "Proprietary" are withheld as a trade secret.			
Section 4 – First aid Measures			
Symptoms of Exposure			
Acute	Irritation of affected area		
Delayed	Irritation		
Inhalation	Vapors and mists expected to be slightly irritating to upper respiratory tract.		
Skin	Irritation may result		
Eye Contact	Irritation may cause transitory stinging and tearing.		

Ingestion	Very low toxicity if ingested. Ingestion of larger amounts may cause gastrointestinal upset and possible temporary central nervous system depression.
<b>First Aid Instructions</b>	
Inhalation	Remove to fresh air. If symptoms persist, seek medical attention.
Skin	Wash skin with soap and water. Remove any contaminated clothing. Seek medical attention if irritation develops or persists.
Eye Contact	Flush with water for at least 20 minutes. Seek medical attention if irritation develops or persists.
Ingestion	DO NOT induce vomiting, seek medical attention if you feel unwell.
Other	Not Applicable
<b>Section 5 – Fire Fighting Measures</b>	
Suitable Extinguishing Material	<b>Water, water fog, water spray, alcohol-resistant foam, dry chemical, sand, or carbon dioxide.</b>
Unsuitable Extinguishing Material	No Data Available
Hazards from Combustion	Smoke may contain the original material in addition to but not limited to: oxides of phosphorus, potassium, carbon, and nitrogen.
Special Protective Equipment for Firefighters	Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas and keep upwind of fire.
<b>Section 6 – Accidental Release Measures</b>	
Personal precautions and emergency procedures	Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. In case of an uncontrolled release, clear the area and respond with trained personnel.
Protective equipment to prevent the contamination of skin, eyes, and clothing.	Usage of safety glasses or goggles is recommended. Chemical resistant gloves, chemical resistant apron, boots, and full suit will be necessary depending on the extent of clean up task. If ventilation does not control airborne concentration then respiratory protection equipment that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements should be used.
Methods and materials used for containment	Stop leak if present and safe to do so. In the event of a large spill, dike the area to contain release and prevent material from entering drains. Collect liquid in an appropriate container or absorb with inert absorbent material and place in chemical waste container.
Cleanup procedures	Do not flush to sewer. Comply with all federal, state, and local regulations.
<b>Section 7 – Handling and Storage</b>	
Precautions for safe handling	Protect container from physical damage. Wear appropriate personal protection equipment. Do not expose containers to open flame, excessive heat, or direct sunlight. Use local exhaust over processing area. Do not eat, drink or smoke around products.
Recommendations on the conditions for safe storage, Storage/handling incompatibilities.	Store in a cool, dry and ventilated area away from sources of heat, moisture and incompatible materials. Observe all warnings and precautions listed for the product. Keep container closed to prevent contamination.
<b>Section 8 – Exposure Controls/Personal Protection</b>	
OSHA Permissible Exposure Limits (PELs)	Not Applicable
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values	Not Applicable
Other Exposure Limits	Propylene Glycol: AIHA WEEL is 10 mg/m <sup>3</sup> for total vapor and aerosol.
Engineering Control	Use mechanical (general) ventilation to control airborne levels below exposure guidelines.
Individual Protection Measures	Wear protective safety glasses or goggles, gloves, apron, vapor respirator.
<b>Section 9 – Physical and Chemical and Chemical Properties</b>	
Appearance (physical state, color, etc.)	Liquid, Clear, Orange
Odor	Slight to no odor
Odor threshold	No Data Available
Freezing point	15°F / -10°C
Initial boiling point and boiling range	215°F / 102°C

Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limits	Not Explosive
Flash point	No Data Available
Auto-ignition temperature	> 700°F / > 370°C
Decomposition temperature	Not Applicable
pH	9.0 - 11.0
Viscosity	Approx. 3 cSt at 60°F
Relative density	1.030 - 1.040
Solubility	Miscible in water
Partition coefficient: n-octanol/water	No Data Available
Vapor pressure	Approx. 11 mmHg at 60°F
Evaporation rate (Butyl Acetate = 1)	<1
Vapor density (air = 1)	1.00

### Section 10 – Stability and Reactivity

Reactivity	Product is stable under typical use temperatures.
Chemical Stability	Product is stable under typical use temperatures.
Hazardous Reactions	Avoid contact with oxidizing materials and strong acids.
Conditions to Avoid	Heat, flames, and incompatibles.
Incompatible Materials	Avoid contact with oxidizing agents and strong acids.
Decomposition Products	Carbon dioxide and carbon monoxide may form when heated to decomposition. Aldehydes, alcohols or other organic acids may also be formed.

### Section 11 – Toxicological Information

Likely Routes of Exposure		Eyes / Skin / Ingestion / Inhalation			
	<b>Effects from Short Term Exposure</b>		<b>Effects from Long Term Exposure</b>		
Delayed Effects	Irritation of affected area		Irritation of affected area		
Immediate Effects	Irritation of affected area		Irritation of affected area		
Chronic Effects	Not Applicable		Lactic acidosis, stupor and seizures have been reported following chronic ingestion.		
The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose) - the estimated amount [of a substance] expected to kill 50% of test animals in a single dose).			Propylene Glycol: Skin: The LD50 for skin absorption in rabbits is >10,000 mg/kg Ingestion: The oral LD 50 for rats is 20,000 mg/kg		
Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.			Irritation of affected areas. Lactic acidosis, stupor and seizures.		
<b>Listed in the National Toxicology Program (NTP) Report on Carcinogens?</b>	No	<b>Found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs?</b>	No	<b>Found to be a potential carcinogen by OSHA?</b>	No

### Section 12 – Ecological Information

Ecotoxicity	<p>Low Ecotoxicity.</p> <p><u>Propylene glycol:</u>            NOEC - Pimephales promelas (fathead minnow) - 7 d, 11530 mg/L            LC50 - Ceriodaphnia dubia (water flea) - 2 d, &gt;18000 mg/L            EC50 (immobility) - Daphnia magna (water flea) - 2 d, &gt;1000 mg/L            EC50 (population change) - Lemna gibba (inflated duckweed) - 7 d, &gt;12000 mg/L</p> <p><u>Inhibitors &amp; dye (no data available for some inhibitors):</u>            LC50 - Danio rerio (zebra danio) - 4 d, &gt;2000 mg/L            LC50 - Biomphalaria glabrata (snail) - 4 d, &gt;100 mg/L</p>
-------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Persistence and Degradability	Mixture is readily biodegradable.  <u>Propylene glycol:</u> Biodegrades under aerobic & anaerobic conditions. Theoretical Oxygen Demand: 1.68 mg/mg Chemical Oxygen Demand: 1.5 mg/mg Biochemical Oxygen Demand (BOD5): 69%  <u>Inhibitors &amp; Dye:</u> No data available.	
Bioaccumulation	Does not bioaccumulate significantly	
Mobility in Soil	Dissolves in water. If product enters soil, it will be highly mobile and may contaminate ground water	
Other Adverse Effects	No Data Available	
<b>Section 13 – Disposal Considerations</b>		
Do not dump into sewers, on ground or into any bodies of water. Contact local sewer, municipal, state and/or federal agencies to determine appropriate disposal options.		
<b>Section 14 – Transport Information</b>		
Is product DOT regulated in Non-Bulk packaging?	No	
<b>DOT BULK</b>		
UN number	Not Regulated	
UN proper shipping name	Not Regulated	
Transport hazard class(es)	Not Regulated	
Packing group number	Not Regulated	
Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code))	Not Regulated	
Guidance on transport in bulk (according to Annex II of MARPOL 73/783 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code))	Not Regulated	
Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises	Not Regulated	
<b>Section 15 – Regulatory Information (Not indicated anywhere else on this SDS)</b>		
Safety Regulations	OSHA Hazard Communication Standard: This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
Health Regulations	Not Available	
Environmental Regulations	Not Available	
SARA 311/312	Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312	Superfund Amendments and Reauthorization Act of 1986 Title III (SARA) Sections 311 and 312: Immediate (Acute) Health Hazard - No; Delayed (Chronic) Health Hazard - No; Fire Hazard - No; Reactive Hazard - No; Sudden Release of Pressure Hazard - No. Section 313: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.
HMIS	Blue/Health	0
	Red/Flammability	0
	Orange/Physical Hazard	0
	White/Personal Protection	X
NFPA 0 (no hazard) to 4 (severe risk)	Health (Blue)	0
	Flammability (Red)	0
	Instability/Reactivity (Yellow)	N/A
	Special (White)	0

US Toxic Substance Control Act	Components of this product listed in the February 2019 TSCA Inventory update are designated as ACTIVE or are exempt from Inventory requirements under 40 CFR 720.30
CA Proposition 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
CEPA – Domestic Substances List (DSL)	All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
<b>Section 16 – Other Information</b>	
This SDS is applicable for all dilutions, colors, and containers for this brand of product. The information herein is provided in good faith and believed to be accurate as of the effective revision date shown. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/ user's responsibility to ensure that activities comply with all federal, state, provincial or local law.	
Revision Date: 7/16/2025	