

**HOUGHTON CHEMICAL CORPORATION  
MATERIAL SAFETY DATA SHEET**

**"SAFE-T-THERM®"**

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**SECTION 1  
IDENTIFICATION**

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MANUFACTURER: Houghton Chemical Corporation  
ADDRESS: 52 Cambridge Street, Allston, MA 02134  
EMERGENCY TELEPHONE: (617) 254-1010, 1-800-777-2466 or Chemtrec 1-800-424-9300  
CHEMICAL NAME & SYNONYMS: Non-Toxic Antifreeze  
CHEMICAL FAMILY: Propylene Glycol Based  
FORMULA: Trade Secret  
CAS REGISTRY NUMBER: Not Applicable for blended product  
DOT SHIPPING CLASSIFICATION: Not Regulated  
PRODUCT NUMBER: 51787, 52787, 53787

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**SECTION 2  
HAZARDOUS INGREDIENTS**

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<b>MATERIAL</b>	<b>CAS #</b>	<b>%</b>	<b>TLV (Units)</b>
Propylene Glycol	57-55-6	~95	N/A
Water	7732-18-5	~2	N/A
Corrosion Inhibitors and Dye	TSR#80100075-5002P	3	N/A

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**SECTION 3  
PHYSICAL DATA**

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BOILING POINT: 315°F  
FREEZING POINT: -5°F  
SPECIFIC GRAVITY: 1.06  
VAPOR PRESSURE AT 20°C: 0.1 mm Hg  
VAPOR DENSITY (air=1): 2.1  
SOLUBILITY IN WATER: Complete  
% VOLATILE BY VOLUME: Greater than 95%  
EVAPORATION RATE: (H<sub>2</sub>O=1) Less than 1

APPEARANCE AND ODOR: Distinct Orange, odorless

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**SECTION 4  
FIRE AND EXPLOSION HAZARD DATA**

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FLASH POINT:	225°F
AUTO IGNITION TEMPERATURE:	>700°F
FLAMMABLE LIMITS IN AIR:	~ 2.6 - 12.5
EXTINGUISHING MEDIA:	Alcohol Foam
SPECIAL FIRE FIGHTING PROCEDURES:	N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None

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**SECTION 5  
REACTIVITY DATA**

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STABILITY:	This material is stable
INCOMPATIBILITY:	Keep away from strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	N/A
HAZARDOUS POLYMERIZATION:	Will not occur

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**SECTION 6  
HEALTH HAZARD DATA**

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THRESHOLD LIMIT VALUE:	Nuisance Dust 15 mg/M <sup>3</sup> 8 hours
EFFECTS OF OVEREXPOSURE:	
Eye Contact:	Irritation may result.
Skin:	no significant signs or symptoms expected
Inhalation:	This material is not expected to be a respiratory hazard except if aspirated. If swallowed, can enter lungs and cause damage.
Ingestion:	If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Aspiration during ingestion or vomiting may cause lung damage.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes:	Flush with plenty of water for at least 15 minutes.
Skin:	Flush with plenty of water, wash with mild soap if available.
Inhalation:	Remove to fresh air.
Ingestion:	Do not induce vomiting, aspiration may cause lung damage.

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## **SECTION 7 SPILL OR LEAK PROCEDURES**

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### STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED:

This liquid is biodegradable but large spills may contaminate public waters. Prevent flow to sewers/public waters. Restrict clean up water use. Notify water supply environment authorities. Impound/recover large land spills. Soak up small spills with absorbent material. Use suitable disposal containers, High biodegradability can stimulate algae growth. Dispose residue to reduce possible aquatic harm.

WASTE DISPOSAL METHOD:	Consult with local sewer, municipal, state and/or federal agencies to determine appropriate current disposal options.
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## **SECTION 8 SPECIAL PROTECTIVE INFORMATION**

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RESPIRATORY PROTECTION:	Normally not required
VENTILATION:	None needed under anticipated conditions of normal use beyond that needed for normal comfort control.
PROTECTIVE GLOVES:	If contact with hot liquid possible use suitable protective gloves.
EYE PROTECTION:	If contact with hot liquid possible use suitable splash goggles and face shield.
OTHER PROTECTIVE EQUIPMENT:	N/A

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## **SECTION 9 SPECIAL PRECAUTIONS**

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### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Follow good work/hygiene practices. Provide safety shower and wash in immediate area. Workers should wash with soap and water before eating, smoking or using toilet facilities. Launder contaminated clothing before re-use.

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