

**HOUGHTON CHEMICAL CORPORATION
MATERIAL SAFETY DATA SHEET**



"SAFE-T-THERM®"

**SECTION 1
IDENTIFICATION**

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: 510787, 520787, 550787, 560787

**SECTION 2
HAZARDOUS INGREDIENTS**

MATERIAL	CAS #	% by Weight	TLV (Units)
Propylene Glycol	57-55-6	≈95	Not applicable
Water	7732-18-5	≈2	Not applicable
Corrosion Inhibitors and Dye	TSR#80100075-5002P	3	Not applicable

**SECTION 3
PHYSICAL DATA**

BOILING POINT @760 mm Hg: 311°F
FREEZING POINT: -70°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:(H₂O=1) Less than 1
APPEARANCE AND ODOR: Distinct Orange, Odorless

**SECTION 4
FIRE AND EXPLOSION HAZARD DATA**

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: Not applicable
UNUSUAL FIRE AND EXPLOSION HAZARDS: None

**SECTION 5
REACTIVITY DATA**

STABILITY: This material is stable.
INCOMPATIBILITY: Keep away from strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable
HAZARDOUS POLYMERIZATION: Will not occur

**SECTION 6
HEALTH HAZARD DATA**

THRESHOLD LIMIT VALUE: Nuisance Dust 15 mg/M³ 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 water for at least 15 minutes.
Skin:	Flush with water, wash with mild soap if available.
Inhalation:	Remove to fresh air.
Ingestion:	DO NOT induce vomiting, aspiration may cause lung damage; seek medical attention.

SECTION 7 SPILL OR LEAK PROCEDURES

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

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:	Not applicable

SECTION 9
SPECIAL PRECAUTIONS

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.