Houghton Chemical Corporation

Safety Data Sheet



SAFE-T-THERM® AL

Section 1 - Identification							
Houghton Chemical Corporation							
Manufacturer Address 52 Cambridge Street, Allston, MA 02134							
1-617-254-1010 or 1-800-777-2466							
Emergency Telephone CHEMTREC: 1-800-424-9300							
Chemical Name & Synonyms Antifreeze/Inhibited Propylene Glycol							
Chemical Family Propylene Glycol Mixture							
Recommended Use Heat Transfer Fluid							
Restrictions on UseDilution to 50% is generally recommended: dilute to meet local condition.							
Section 2 – Hazard(s) Identification							
Hazard Classification Toxic to Reproduction, Category 2							
Signal Word Warning							
Hazard Statement Suspected of damaging fertility or the unborn child.							
Pictogram Description Health Hazard							
Precautionary Statement Obtain special instructions before use. Do not handle until all safety precautions been read and understood. Wear eye & face protection and protective gloves a protective clothing. Response: If exposed or concerned: Get medical advice. Storage: Storage: Store locked up. Disposal:	Response: If exposed or concerned: Get medical advice. Storage: Store locked up. Disposal: Contact local sewer, municipal, state and/or federal agencies to determine appropriate disposal options for the product. Dispose of this container with a registered						
Any other Hazard not otherwise 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 93%							
Vater N/A 7732-18-5 1%							
Inhibitors & Dye N/A Proprietary 6%							
Section 4 – First aid Measures							
Symptoms of Exposure							
Acute Irritation of affected area							
Delayed Irritation	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.	t Irritation may cause transitory stinging and tearing.						
Very low toxicity if ingested. Ingestion of larger amounts may cause gastrointestinal upset and							
possible temporary central nervous system depression.							
First Aid Instructions							
on 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 irritations develops or persists.	Wash skin with soap and water. Remove any contaminated clothing. Seek medical attention if						
	Flush with water for at least 20 minutes. Seek medical attention if irritations develops or persists.						
	DO NOT induce vomiting, seek medical attention.						
	Not Applicable						

Suitable Extinguishing Material Water, water fog, water spray, alcohol-resistant foam, dry chemical, sand, or carbon dioxide. Unsuitable Extinguishing Material No Data Available Hazards from Combustion Snoke may contain the original material in addition to but not limited to: Carbon Monoxide, Carbon Dioxide. Special Protective Equipment for Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas and keep upwind of fire. Special Protective Equipment to prevent the contained breathing apparatus tapron, boots, and thill suit will be necessary depending on the extent of clanu up task. If ventilated one on the store of clanu up task. If ventilation does not control altone concentration them respiratory protection equipment to prevent the containment that meets SPAS. 29 CFR 1910. 134 and ANSI 288.2 requirements should be used. Methods and materials used for containent that meets SPAS. 29 CFR 1910. 134 and ANSI 288.2 requirements for absorb with inert material and place in chemical vaste container. Caleet (uption for safe handling Protect container from physical damage. Wear appropriate personal protection equipment. Don to expose containers to open flame, excessive heat, or direct sunight. Use local exhaust ver processing area. Do not eat, drive to roso smoke around products. Recommendations on the conditions for safe torial protection or sofker around products. Store in a cool, dry and well ventilated area away from sources of heat, moisture or sofker around products. Recommendations on the conditions for safe torial protectine sofker around products. Not Applicable	Se	ction 5 – Fire Fighting Measures			
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Appearance (physical state, color, etc.)Liquid, Clear, Fluorescent YellowUpper/lower flammability or explosive limitsNot Explosive; LOWER: 2.6% (v) UPPER: 12.5% (v)OdorSlight to no odorVapor pressure133 Pa / 0.1 mmHgOdor thresholdNot ApplicableVapor density (air = 1)2.10pH $8.0 - 9.5$ Relative density $1.053 - 1.060$ Freezing point (as 50%) $-22^{\circ}F / -31^{\circ}C$ Solubility(ies)Miscible in waterInitial boiling point and boiling range $311^{\circ}F / 155^{\circ}C$ Flash point $225^{\circ}F / 107^{\circ}C$ Evaporation rate (Butyl Acetate = 1)<1	Section 9 – Phy				
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Flash point 225°F / 107°C Evaporation rate (Butyl Acetate = 1) <1					
Evaporation rate (Butyl Acetate = 1) <1					
Flammability (solid, gas)Not FlammablePartition coefficient: n-octanol/waterNo Data AvailableAuto-ignition temperature> 700°F / > 370°C					
Partition coefficient: n-octanol/water No Data Available Auto-ignition temperature > 700°F / > 370°C		Not Flammable			
		No Data Available			
	Auto-ignition temperature	> 700°F / > 370°C			
Decomposition temperature; and Not Applicable	Decomposition temperature; and	Not Applicable			

Viscosity			~75 cps at	t 60°F				
licectry		Se	· ·					
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	0 0							
Incompatible Materials Avoid contact with oxidizing agents and strong acids.								
				on monoxide may form		decomposition		
Decomposition Proc	ducts			her organic acids may a				
				logical Informatio				
Likely Routes of Ex	posure		Eye	s / Skin / Ingestion / Inh	alation			
			t Term Exposure		om Long Term	Exposure		
Delayed Effects	Irritation of aff			Irritation of affected ar				
Immediate Effects	Irritation of aff		area	Irritation of affected ar				
Chronic Effects	Not Applicable	Э		Lactic acidosis, stupor following chronic inge		ave been reported		
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.								
Description of the symptoms associate including symptoms exposure.	ymptoms. This ed with exposu	re to th	ne chemical	Irritation of affected areas. Lactic acidosis, stupor and seizures.				
Listed in the National Toxicology Program (NTP) Report on Carcinogens?	No		Found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs?	No	Found to be a potential carcinogen by OSHA?	No		
		Se	ection 12 – Ecolo	ogical Information				
Ecotoxicity	Low Ecoto							
Persistence and Degradability	Biodegrad	able						
Bioaccumulation	Does not b	Dioaccu	mulate significantly					
Mobility in Soil		Dissolves in water. If product enters soil, it will be highly mobile and may contaminate ground						
Other Adverse Effects	No Data A	vailabl	е					
		Sec	ction 13 – Dispo	sal Consideration	S			
Do not dump into se agencies to determi		nd or ir	nto any bodies of wat	ter. Contact local sewe		e and/or federal		
		Se	ection 14 – Tran	sport Information				
Is product DOT reg	ulated in Non-E			-	No			
			DOT	BULK				
UN number					Not Regulate	ed		
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 transp International Code f	ort in bulk (acc or the Construe	ording ction a	to Annex II of MARF	POL 73/783 and the ps Carrying Dangerous	Not Regulate	ed		

Any special precautions which an e with, in connection with transport o premises	Not Regulated				
•	atory Ir	nformation (Not indicated an	where else on this SDS)		
Safety Regulations	OSH. Chen	A Hazard Communication Standard:			
Health Regulations	Not A	vailable			
Environmental Regulations	Not A	vailable			
SARA 311/312	mate healt acco	d upon available information, this rial is classified as the following n and/or physical hazards rding 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.		
		Health	0		
HMIS		Flammability	1		
		ge/Physical Hazard	0		
		e/Personal Protection	X		
		h (Blue)	0		
NFPA		mability (Red)	1		
0 (no hazard) to 4 (severe risk)		bility/Reactivity (Yellow)	N/A		
	Spec	ial (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.			
	S	ection 16 – Other Informatio	n		

This SDS is applicable for all dilutions 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.

Product Dilutions Differentials						
Properties ¹	60%	50%	40%	35%	30%	25%
SAFE-T-THERM [®] AL	60%	50%	40%	35%	30%	25%
Performance Additives and Water	40%	50%	60%	65%	70%	75%
Specific Gravity (15/15°C 60/60°F)	1.048 - 1.053	1.043 - 1.049	1.037 - 1.043	1.033 - 1.038	1.029 - 1.034	1.025 - 1.030
Reserve Alkalinity (minimum)	1	1	1	1	1	1
Freeze Point (maximum)	-49°F / -45°C	-22°F/-31°C	-4°F / -20°C	4°F / -16°C	10°F / -12°C	15°F/-10°C
¹ Data for the concentrate is based on volume of Propylene Glycol; data for mixtures is based on volume of SAFE-T-THERM® AL.						
Revision Date: 8/24/2020						