

**HOUGHTON CHEMICAL CORPORATION
MATERIAL SAFETY DATA SHEET****"SECURITY HEAVY DUTY ANTIFREEZE/COOLANT CONCENTRATE"****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: Permanent Antifreeze and Summer Coolant

CHEMICAL FAMILY: Ethylene Glycol Based

FORMULA: Trade Secret

CAS REGISTRY NUMBER: Not applicable for blended product

DOT SHIPPING CLASSIFICATION: Not regulated in quantities containing less than 5,000
pounds of ethylene glycol

PRODUCT NUMBER: 610700, 620700, 630706, 62700

**SECTION 2
HAZARDOUS INGREDIENTS**

MATERIAL	CAS #	%	TLV (Units)
Ethylene Glycol	107-21-1	90-95	50 ppm
Diethylene Glycol	111-46-6	≤ 5	50 ppm
Sodium Tetraborate	1303964	<1	1 mg/m ³
Sodium Nitrite	7632000	<1	Not applicable
Sodium Tolytriazole	64665572	<1	Not applicable
Sodium Hydroxide	1310732	<1	2 mg/m ³

SECTION 3 PHYSICAL DATA

BOILING POINT @760 mm Hg.:	325°F
FREEZING POINT:	-4°F
SPECIFIC GRAVITY:	1.12
VAPOR PRESSURE AT 20°C:	0.1
VAPOR DENSITY (air = 1):	2.1
SOLUBILITY IN WATER:	Complete
% VOLATILE BY VOLUME:	Greater than 95%
EVAPORATION RATE:	Less than 1
APPEARANCE AND ODOR:	Fuchsia; mild odor

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	250°F - TOC 225°F - TCC
AUTO IGNITION TEMPERATURE:	Not applicable
FLAMMABLE LIMITS IN AIR:	LEL = 3.0 UEL = 16 (calculated)
EXTINGUISHING MEDIA:	Water, fog, alcohol foam, dry chemical or CO ₂ for small fires
SPECIAL FIRE FIGHTING PROCEDURES:	A solid stream of water directed into hot burning liquid can cause frothing.
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:	Burning can produce carbon dioxide or carbon monoxide.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 6 HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE:	50 ppm (vapor or mist)
EFFECTS OF OVEREXPOSURE:	Irritating to eyes and skin. Inhalation irritates nose and throat. High vapor concentration causes nausea, vomiting and headaches.
Eye Contact:	Irritation may result.
Skin:	May be mildly irritating to skin. Slightly toxic on prolonged or repeated contact.
Inhalation:	Exposure to high vapor concentration from heated antifreeze coolant or exposure to mists may produce nausea, vomiting, headache, dizziness and irregular eye movements.
Ingestion:	Swallowing causes abdominal discomfort or pain, dizziness, lumbar pain, oliguria, uremia and central nervous system depression. Large volumes cause kidney damage and can be fatal.
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 and give artificial respiration if breathing has stopped.
Ingestion:	If swallowed, IMMEDIATELY contact a poison control center, emergency treatment center, or physician.

**SECTION 7
SPILL OR LEAK PROCEDURES**

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

Wear suitable protective equipment. Large spills should be contained and collected. Small spills can be collected or may be absorbed with appropriate liquid absorbing materials. All spill response and disposal should be carried out in accordance with federal, state and local requirements.

WASTE DISPOSAL METHOD:

Consult with local sewer, municipal, state and/or federal agencies to determine appropriate current disposal options.

**SECTION 8
SPECIAL PROTECTIVE INFORMATION**

RESPIRATORY PROTECTION:

Not necessary under normal conditions of use. Provide adequate ventilation to keep concentration below permissible exposure limits.

VENTILATION:

Mechanical or other

PROTECTIVE GLOVES:

Rubber gloves recommended.

EYE PROTECTION:

Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT:

Normally not required

**SECTION 9
SPECIAL PRECAUTIONS**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Do not breathe mist or spray. 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.