MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Hartland Global HD Antifreeze Concentrate
PRODUCT USE/CLASS:	Coolants / Antifreeze
EMERGENCY TELEPHONE:	1-800-633-8253 24 Hour (PERS) Professional Emergency Resource Services
DISTRIBUTOR:	Hartland Lubricants & Chemicals 2455 Commercial Drive Sparta, WI 54656 608-487-9770 www.hartlandlubes.com
REVISION DATE:	10.28.2014

SECTION 2: HAZARDS IDENTIFICATION

Route of Entry: Eyes; Skin; Inhalation; Ingestion;
Target Organs: Kidneys; Eyes; Central nervous system; Liver; Respiratory system; Skin;
Inhalation: Vapors may be irritating to respiratory system.
Skin Contact: Brief contact is essentially nonirritating. Prolonged contact may cause irritation.
Eye Contact: May cause irritating. Vapors or mist may cause irritation
Ingestion: Harmful if swallowed. Large amounts may be harmful or fatal if swallowed. May cause drowsiness and dizziness.

WHMIS classification: Class D1B (Materials Causing Immediate and Serious Toxic Effects, Toxic Material) Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material)

HMIS® Rating H2/F1/PH0 NFPA-ratings (scale 0-4): Health = 2, Fire = 1, Reactivity = 0

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients: CAS-#	Percent	Chemical Name
107211	90-95%	Ethylene glycol
7732185	1.0-5%	Water
114666	0.0-5.0%	Diethylene glycol
532-32-1	1.0-5.0%	Benzoic acid, Sodium Salt
1330-43-4	1.0-5.0%	Borates, tetra, sodium salts (anhydrous)
Proprietary	1.0-5.0%	Corrosion inhibitors and dye

SECTION 4: FIRST AID MEASURES

Inhalation:

If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact:

Remove contaminated clothing and wash before reuse. Promptly flush skin with water until all chemical is removed. Wash with soap and water.

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Remove contact lenses after initial 1-2 minutes of flushing and continue flushing. Get immediate medical attention.

Ingestion:

DO NOT DELAY. Do not induce vomiting. For spontaneous vomiting, keep head below hips. Dilute with 1 glass of water. Do NOT give liquids to a drowsy, convulsing or unconscious person. Seek immediate medical attention.

Notes to Physician: May cause significant renal, respiratory and CNS toxicity. May cause significant acidosis. Consider: Gastric lavage with protective airway, administration of ethanol or alcohol dehydrogenase inhibitors, such as fomepizole, as antidotal treatments. Call a doctor or poison control center for guidance.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Alcohol-resistant foam, 427°C (801°F) water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use direct water stream. **Specific Hazards:** Material will not burn unless preheated. Containers exposed to intense heat from fires should be cooled with large quantities of water.

Protective Equipment: Wear full protective clothing and self-contained breathing apparatus (SCBA). **Hazardous Combustion Products:** Smoke may contain the original material in addition but not limited to: Carbon Monoxide, Carbon Dioxide, and Nitrogen Oxides.

Flash Point: Not Available

Auto-ignition Temperature: 427°C (801°F)

LEL: 3.2% volume

UEL: Not Determined

Flammability Classification: OSHA/NFPA Class IIIB combustible liquid

SECTION 6: ACCIDENTAL RELEASE MEASURES

Protective Measures: Isolate area. Avoid contact with spilled material. Watch out for slippery conditions when spillage. Refer to Section 8 of this Material Safety Data Sheet for personal protective equipment. **Clean Up Methods**: Contain spilled material if possible. Collect in suitable and properly labeled containers. Small spills: Pick up excess with inert absorbent material and place into separate waste container. Large Spills: Dike material. Keep away from drains and ground water. Pump into suitable and properly containers or salvage truck for recovery or safe disposal. See Section 13 for disposal considerations.

Additional Advice: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

SECTION 7: HANDLING AND STORAGE

Handling Precautions:

Do not swallow. Avoid contact with eyes, skin, or clothing. Consider normal working hygiene. Wash thoroughly after handling. Wash clothing before reuse and decontaminate or discard contaminated shoes. Do not expose containers to open flame, excessive heat, or direct sunlight. Do not puncture or drop containers. Handle with care and avoid spillage on the floor (slippage). Keep material out of reach of children. Use local exhaust over processing area.

Storage Requirements:

Keep away from heat, sparks, and flames. Protect container and its fittings from physical damage. Store in cool/dry area. Suitable packing materials. Do not store near food, foodstuffs, drugs or potable water supplies.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Use mechanical (general) ventilation to control airborne levels below exposure guidelines. **Protective Equipment:**

HMIS PP, C | Goggles, Gloves, Apron

Eyes/Face Protection: Usage of safety glasses or goggles is recommended.

Skin Protection: Chemical resistant gloves; Apron; Boots; Face shield or Full suit selection will depend on task. Launder contaminated clothing before use.

Hand Protection: Use of gloves approved to relevant standards made from the following materials may provide suitable protection: PVC, Neoprene rubber or nitrile rubber. Personal hygiene is a key element of effective hand care.

Respiratory Protection: If ventilation does not control airborne concentrations, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. **Ingestion:** Use good personal hygiene. Do not consume food in the work area. Wash hands before eating, drinking or smoking.

Exposure Guidelines/Other:

Exposure Limits: Component List Type Value Ethvlene Glvcol ACGIH 100 ma/m3 Ceilina Aerosol OSHA PEL Ceiling 50 ppm (125 mg/m3) Diethvlene Glvcol 10 ma/m3 AIHA WEEL Sodium Tetraborate 10 mg/m3 OSHA Z1A TWA ACGIH TWA 2 mg/m3 (inhalable fraction) ACGIH STEL 6 mg/m3 (inhalable fraction)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES Appearance: No Data Available... Physical State: No Data Available... Odor: No Data Available... pH: No Data Available... PH: No Data Available... Vapor Pressure: No Data Available... Vapor Density: No Data Available... Boiling Point: No Data Available... Freezing/Melting Point: No Data Available... Solubility: No Data Available... Spec Gravity/Density: No Data Available...

MATERIAL SAFETY DATA SHEET

SECTION 10: STABILITY AND REACTIVITY
Stability: Product is stable under normal conditions.
Conditions to avoid: High Temperature.
Materials to avoid (incompatibility): Strong Oxidizing Agents. Strong Acids; Strong Bases.
Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
Aldehydes; Alcohols; Ethers; Ammonia
Hazardous Decomposition products:
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION Acute Toxicity: Based on Ethylene Glycol

Oral (LD 50): Rat >2000 mg/kg. Human adult 3 Ounces

Inhalation (LC 50): 7h, Aerosol, Rat >3.95 mg/l. inhalation of vapors may cause irritation to the respiratory system.

Skin irritation: May cause moderate skin irritation.

Dermal Toxicity (LD 50): Rabbit >2000 mg/kg (Low)

Eye irritation: Moderately irritating to eyes.

Sensitization: Not a skin sensitizer

Chronic Toxicity and Carcinogenicity: Did not cause cancer in long term animal studies

Repeated Dose Toxicity: Shown effects on: Kidney, Liver, Central Nervous System

Mutagenicity: Not known

Reproductive and Developmental Toxicity: Ingestion of large amounts has shown to interfere with reproduction and produce birth effects in animals.

SECTION 12: ECOLOGICAL INFORMATION

Acute Toxicity: No data on the product itself

Mobility: Dissolves in water. If product enters soil, it will be highly mobile and may contaminate ground water.

Persistence/degradability: No data on the product itself.

Bioaccumulation: Does not bio accumulate significantly.

SECTION 13: DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container residue could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

SECTION 14: TRANSPORT INFORMATION

US DOT Classification (49CFR)

Identification Number NA 3082 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. Technical Name: (contains Ethylene Glycol) Class/Division: 9 Packing Group: III Reportable Quantity: 5,000 lbs. ERG page number: 171 **Canadian Road and Rail Shipping Classification** NOT REGULATED **IMDG** NOT REGULATED **IATA/ICAO** NOT REGULATED

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Standard:

This product is a "Hazardous Chemical" as defined by the OSHA 29CFR 1910.1200 SARA Hazardous Categories Section 311/312 (EPCRA): Immediate (Acute): yes Delayed (Chronic): yes Fire: no Reactive: no Sudden Release: no SARA Toxic Release Inventory Section 313 (TRI): Component CAS Percentage Ethylene Glycol 107-21-1 >90% CERCLA Component CAS Reportable Quantity Ethylene Glycol 107-21-1 5,000 lbs. California Safe Water Drinking and Toxic Enforcement Act (Proposition 65) This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Component Notification Status

DSL (CA) Listed TSCA (US) Listed

<u>COMPONENT /</u>	(CAS/PERCENT) /	CODES		
*Ethylene glycol	(107211/90-95%)	CERCLA, HAP, MASS, NJHS, OSHAWAC, PA,		
		SARA313, TSCA, TXAIR		
*Water	(7732185/1.0-5.0%)	TSCA		
*Diethylene glycol	(111466/0-5.0%)	HAP, PA, TSCA		
*Benzoic acid, sodium salt	(532321/1.0-5.0%)	TSCA		
*Borates, tetra, sodium salts (anhydrous)				
	(1330434 1.0-5.0%)	MASS, OSHAWAC, PA, TSCA, TXAIR		

MATERIAL SAFETY DATA SHEET

REGULATORY KEY DESCRIPTIONS

CERCLA – Superfund clean-up substance HAP- Hazardous Air Pollutants MASS – Massachusetts Hazardous Substances List NJHS – New Jersey Right to Know Hazardous Substances OSHAWAC – OSHA Workplace Air Contaminants PA- Pennsylvania Right to Know List of Hazardous Substances SARA313 – SARA 313 Title III Toxic Chemicals TSCA – Toxic Substances Control Act TXAIR – Texas Air Contaminants with Health Effects Screening Level

SECTION 16: OTHER INFORMATION Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

END OF MSDS DOCUMENT

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