

Prepared according to Global Harmonized System (GHS) standards

SECTION 1

CHEMICAL PRODUCT IDENTIFICATION

Polaris Sales Inc. 2100 Highway 55 Medina, MN 55340 Tel: 763-542-0500

Product Trade Name:

Polaris Extended Life Antifreeze 50/50

CAS Number: Synonyms/Other: Part Number(s): Recommended Use: Restrictions on Use: Created Date: Preparation/Revision Date: Emergency Phone Number: SDS CODE: Mixture N/A N/A Antifreeze Not Determined. 5/30/2015 5/30/2015 1-800-424-9300 (CHEMTREC) 12612

SECTION 2

HAZARD IDENTIFICATION

Appearance: Odor: Classification:

Target Organs: Pictogram(s): Reproductive toxicant category 2 Not applicable.

Acute Toxicity - oral category 4

Clear, Yellow

Sweet

Signal Word:	WARNING
Hazard Statement:	H302 - Harmful if swallowed
	H361 - Suspected of damaging fertility or the unborn child
	H362 - May cause harm to breast-fed children
Other Hazards:	Not determined.
Prevention:	P101 - If medical advice is needed, have product container or label at hand.
	P102 - Keep out of reach of children.
	P103 - Read label before use.
	P201 - Obtain special instructions before use
	P202 - Do not handle until all safety precautions have been read and understood
	P260 - Do not breathe dust/fume/gas/mist/vapours/spray
	P263 - Avoid contact during pregnancy/while nursing
	P264 - Wash hands thoroughly after handling
	P270 - Do not eat, drink or smoke when using this product
	P281 - Use personal protective equipment as required
Response:	P330 - Rinse mouth
	P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
	P308+P313 - IF exposed or concerned: Get medical advice/attention
Storage Procedures:	P405 - Store locked up
Disposal:	P501 - Dispose of contents and container in accordance with federal, state, and local
Disposal.	regulations
Other:	See section 11 for complete health hazard information.



COMPOSITION OF INGREDIENTS

Component	CAS Number	Percentage (by weight)
Ethylene Glycol	107-21-1	45 - 55%
Diethylene Glycol	111-46-6	1.0 - 3.0%
Organic acid Salts	Proprietary	1.0 - 3.0%
Denatonium Benzoate	3734-33-6	< 0.1%

The balance of components do not contribute to the overall classification of the fluid, according to the GHS Standard.

SECTION 4	FIRST AID MEASURES
Eye Contact:	If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.
Skin Contact:	Call a doctor if you feel unwell.
Inhalation:	Get medical advice or attention if you feel unwell or are concerned.
Ingestion:	Rinse mouth. Call a doctor if you feel unwell.
Other:	If exposed or concerned: Get medical advice/attention (carcinogen).
SECTION 5	FIRE FIGHTING MEASURES
Flash Point:	118℃ (244年) typical by ASTM D92 (COC) for Ethyle ne Glycol.
Flammable limits:	Not determined.
Extinguishing media:	Use dry chemical, alcohol foam, all purpose AFFF or carbon dioxide to extinguish fire.
Special firefighting procedures	DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).
Unusual fire & explosion hazards:	Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.
Byproducts of combustion:	Fires involving this product may release oxides of carbon, phosphorus, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.
Autoignition temperature:	Not determined.
Explosion data:	Not determined. Care should always be exercised in dust/mist areas.
Other:	Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
SECTION 6	ACCIDENTAL RELEASE MEASURES

Spill control procedures (land): Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. Clean up residue with water. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300).

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Spill control procedures	If a large spill occurs notify appropriate authorities (normally the National Response
(water): Waste disposal method:	Center or Coast Guard at 800-424-8802). Do not empty into drains. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.
Other:	CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.
SECTION 7	HANDLING AND STORAGE
Handling procedures:	Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse. Handling temperatures should not exceed 60°C (140°F) to min imize danger of burns. Open containers carefully in a well ventilated area or use appropriate respiratory protection. Wash thoroughly after handling.
Storage procedures:	Store containers away from heat, sparks, open flame, or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.
Additional information:	No additional information.
SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION
Personal protection:	Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.
Respiratory protection:	None required if ventilation is adequate. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.
Eye protection:	Eye protection is strongly recommended. Wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).
Hand protection:	Impervious, chemically resistant gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.
Other protection:	Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended based on level of activity and exposure. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.
Local control measures:	Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.
Other:	Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Odor: Odor threshold: pH: Clear, Yellow Sweet Not determined. 8



-37°C
158°C (317°F)
Not determined.
118℃ (244年) typical by ASTM D92 (COC) for Ethyle ne Glycol.
Not determined.
1.10 @ 15.6 °C
Miscible in water, negligible in most petroleum solvents.
Not determined.
Not determined.
Not determined.
Not determined.
Not applicable.

STABILITY AND REACTIVITY

Reactivity	
Chemical stability:	Material is chemically stable at room temperatures and pressure.
Hazardous polymerization:	Will not occur.
Conditions to avoid:	Avoid high temperatures and product contamination.
Incompatibility with other materials:	Avoid contact with acids and strong oxidizing materials.
Decomposition products:	Smoke, carbon monoxide, carbon dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and irritating vapors.
Other:	Not applicable.

SECTION 11

TOXICOLOGICAL INFORMATION

Acute toxicity (LD50) *See note at the bottom of the section

Oral:	300 - 2000 mg/kg
Dermal:	>5000 mg/kg
Inhalation:	>20.0 mg/l
Skin irritation:	Non-irritant
Eye irritation:	Non-irritant
Dermal sensitization:	Not expected to have a sensitizing effect.
Respiratory sensitization:	Not expected to have a sensitizing effect.
Aspiration Hazard:	Not applicable
Chronic Toxicity	
Mutagenicity:	Not suspected of causing genetic defects
Carcinogenicity:	Not suspected of causing cancer.
Reproductive toxicity:	Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.
STOT-single exposure:	Not expected to have adverse effects.
STOT-repeated exposure:	Not expected to have long term adverse effects.
Other:	*All data in this section is based off calculations from Part 3 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.



ECOLOGICAL INFORMATION

Environmental toxicity		
Fish:	> 100 mg/l.	
Invertebrates:	> 100 mg/l.	
Aquatic plants:	> 100 mg/l.	
Microorganism:	> 100 mg/l.	
Persistence/Degradability:	This product is not expected to be readily biodegradable.	
Bioaccumulation:	Not determined.	
Mobility in soil:	Not determined.	
Other:	All classifications are based on calculations in Part 4 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components.	

SECTION 13	DISPOSAL CONSIDERATIONS
Waste disposal:	This product unadulterated by other materials can be classified as a non-hazardous waste. Depending on use, used product may be regulated. Dispose of in a licensed facility. Do not discharge product in to sewer system. Dispose of containers by crushing or puncturing, so as to prevent unauthorized use of used containers. Waste management should be in full compliance with federal, state, and local laws.
Other	The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.

SECTION 14	TRANSPORT INFORMATION
Land Transport (DOT):	UN 3082
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Ethylene Glycol), 9, PG III
Land Transport (TDG):	Not Regulated.
Proper Shipping Name:	Not Applicable.
Sea Transport (IMDG):	Not Regulated.
Proper Shipping Name:	Not Applicable.
Air Transport (IATA):	Not Regulated.
Proper Shipping Name:	Not Applicable.
Other:	Product is not regulated in quantities under 5,000 pounds in a single container according to 49 CFR §172.101 Appendix A.

SECTION 15

REGULATORY INFORMATION

Federal Regulation			
Clean water act/oil:	Not Applicable.		
TSCA:	All components of this material are listed in the U.S. TSCA Inventory.		
Other TSCA:	Not applicable.		
SARA title III:	Section 302/304 extremely hazardous substances:		
	None.		
	Section 311, 312 hazard categorization:		
	Acute (immediate health effects):	YES	
	Chronic (delayed health effects):	YES	
	Fire (hazard):	NO	

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	Reactivity (hazard):	NO
	Pressure (sudden release hazard):	NO
	Section 313 toxic chemicals:	
	Ethylene glycol is subject to Form R reporting	requirements under Section 313.
CERCLA:	For stationary/moving sources – reportable of glycol.	juantity (due to): 5,000 lbs due to ethylene
State Regulations		
Right-to-know	Ethylene Glycol (Florida, Massechusetts, New Jersey, Minnesota, Pennsylvania)	
	California - The normal consumer use of the chemicals known to the state of California to above the significant risk level for carcinogeneric reproductive toxins.	o cause Cancer and/or reproductive harm
	Canada (WHMIS): D2A - material has potentia	al toxic effects.
Other:	A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.	
	Recommend contacting the local authorities in local reporting requirements and also to aid in	

SECTION 16	OTHER INFORMATION			
	NFPA 704	NPCA-HMIS	KEY	
HEALTH:	2	2	0 = Minimal	
FIRE:	1	1	1 = Slight	
REACTIVITY:	0	0	2 = Moderate	
SPECIFIC HAZARD:	None	N/A	3 = Serious	
PROTECTION INDEX:	N/A	В	4 = Severe	

Version:

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Revisions / Comments: N

None.

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