BLUE SKY HD NOAT RED PREDILUTED ANTIFREEZE & COOLANT

Safety Data Sheet

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Section 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Form:	Chemical Mixture
Trade Name:	BLUE SKY® HD NOAT RED Prediluted Antifreeze and Coolant
SDS ID:	74486

1.2 Identified Uses and Restrictions

Use of the substance/mixture:	Automotive and industrial engine cooling system antifreeze and coolant
Recommended Restrictions:	Use strictly in accordance with vehicle manufacturer specifications. Do not mix unapproved formulations.

1.3 Supplier Details

Company Name:	BLUE SKY East LLC
Address:	800 Roosevelt Avenue, Carteret, NJ 07008
Contact Line:	855-BluSkyDEF (855-258-7593), 1 732-969-9200
Official Website:	https://blueskydefna.com/

1.4 Emergency Contact Systems

24-Hour Emergency Dispatch:	855-BluSkyDEF (855-258-7593) or 1-732-969-9200
Technical Representative / Responsible Party:	Dru Soni | SDS@blueskydefna.com
Chemical Spill/Leak Emergency (ERS Service)	Domestic North America: 800-255-3924

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS-US classification:	Reproductive Toxicity Category 2 Acute Toxicity (Oral) Category 4
Target Organ Toxicity:	Specific Target Organ Toxicity following Repeated Exposure (Oral) Category 2

2.2 Label elements

Hazard pictograms (GHS-US):



Exclamation Mark (GHS07)



Health Hazard (GHS08)

Signal word (GHS-US):	Warning
Hazard statements (GHS-US)	H302: Harmful if swallowed. H373: May cause damage to organs (kidneys) through prolonged or repeated exposure if swallowed. H361: Suspected of damaging fertility or the unborn child.

2.3 Precautionary Statements

Precautionary statements (GHS-US) - Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. (P202). Avoid the inhalation of generated mists, vapors, or spray patterns. Wash all exposed skin surfaces meticulously following handling. Restrict eating, drinking, or smoking in operational chemical zones. Implement personal protective gear as specified in the handling protocols.

Precautionary statements (GHS-US) - Response:	Ingestion: If swallowed, contact a regional emergency medical facility, poison control expert, or physician immediately. Rinse oral cavities thoroughly. Do NOT prompt or induce vomiting. Inhalation: If breathing becomes labored, relocate the affected individual to fresh air and support a posture that facilitates easy respiration. Exposure: If direct exposure is verified or suspected, acquire immediate clinical evaluation or advice.
Storage and Disposal:	Keep stored contents secured and locked down safely. Consign residual chemical contents and empty packaging to an authorized hazardous waste processing entity in strict alignment with regional, national, state, and local ordinances.

2.4 Other hazards which do not result in classification

None noted under standard criteria.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable as this represents a distinct mixture.

3.2 Mixtures

Ingredient Name	Chemical Abstract Services (CAS)	Proportion (percent by Wt)	GHS-US Operational Classification
Ethylene Glycol (Base Agent):	CAS: 107-21-1	45 percent to 55 percent	Acute Tox. 4 (Oral), H302
Water (Diluent/Solvent):	CAS: 7732-18-5	45 percent to 55 percent	Not classified
Diethylene Glycol (Co-Solute):	CAS: 111-46-6	Less than 3%	• Acute Tox. 4 (Oral), H302 • STOT RE 2, H373
Potassium 2-ethylhexanoate (Corrosion Inhibitor)	CAS: 3164-85-0	Less than 3%	Repr. 2, H361
Sodium 2-ethylhexanoate (Corrosion Inhibitor)	CAS: 19766-89-3	Less than 3%	Repr. 2, H361
Denatonium Benzoate (Bittering Agent):	CAS: 3734-33-6	0.003 percent to 0.005 percent	• Acute Tox. 4 (Oral), H302 • Skin Irrit. 2, H315 • Eye Irrit. 2A, H319 • STOT SE 3, H335

SECTION 4: FIRST AID MEASURES

4.1 First Aid Actions

General Assessment:	Ensure medical personnel are fully apprised of the technical materials involved. Never introduce oral liquids or therapies to an individual who is semi-conscious or entirely unresponsive.
Inhalation Exposure:	Transport the subject to an unpolluted outdoor space. If respiratory actions cease entirely, administer controlled artificial respiration. Seek prompt clinical guidance if discomfort persists.

Dermal Contact:	Flush the contaminated skin zone immediately with large quantities of clean water. Strip off compromised or soaked clothing items. Clean clothes thoroughly before reusing. If skin irritation manifests or continues, secure immediate clinical oversight
Ocular Contact:	Expel contact lenses when applicable and structurally uncomplicated to perform. Flush eyes continuously for a minimum threshold of fifteen minutes utilizing gentle, clean water streams while actively holding both upper and lower eyelids open. If eye irritation lingers, obtain professional ophthalmic care.
Ingestion Action:	Contact a poison management center or healthcare professional urgently. Rinse the oral cavity cleanly. If the individual exhibits full cognitive awareness, administer two full glasses of water. Do NOT prompt vomiting unless explicitly instructed by authorized clinical personnel.

4.2 Acute and Delayed Symptoms

Systemic Impact:	Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child
Dermal Contact:	May lead to moderate localized irritation.
Ocular Contact:	Immediate contact can cause direct eye irritation.
Ingestion Danger:	Ingesting even minimal doses represents a critical physiological threat. The human lethal threshold median is estimated at approximately one hundred milliliters (equivalent to three fluid ounces).

4.3 Immediate Medical Interventions

Clinical Guidance:	For attending physicians, the implementation of intravenous 4-methylpyrazole (fomepizole) acts as a highly specialized antidote. This molecule serves as an inhibitor of alcohol dehydrogenases, successfully preventing the synthesis of toxic, destructive metabolites originating from ethylene glycol breakdown. Timely administration can reduce severe metabolic disruptions before the onset of metabolic acidosis, comatose states, seizures, or irreversible renal collapse.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing Media

Approved Agents:	Alcohol-resistant foam, water fog, fine water spray patterns, dry chemical powders, carbon dioxide, or clean sand.
Prohibited Methods:	Avoid applying solid, high-pressure water streams, as this practice can fragment and spread burning material.

5.2 Specific Substance Hazards

Thermal Decomposition:	Under intense fire conditions, generated smoke will contain the fundamental compound alongside various toxic or highly irritating breakdown products. Thermal degradation can release carbon monoxide and carbon dioxide. The mixture itself does not present an immediate flash hazard but will burn when subjected to prolonged high-temperature environments.

5.3 Firefighter Protocols

Operational Tactics:	Deploy water spray or fog streams to cool down adjacent or threatened storage vessels. Exercise profound safety precautions during chemical fires. Prevent any deployed fire control water runoff from entering public water systems, storm sewers, or topsoil environments.
Personal Protective Gear:	Do not engage the fire perimeter without full chemical-resistant turnout gear and an independent, positive-pressure self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Protection & Emergency Operations

For Non-Emergency Personnel:	Immediately isolate the risk area and clear out unauthorized or non-essential personnel.
For Emergency Responders:	Outfit cleanup crews with specialized personal protective gear as detailed in Section 8.2. Ensure adequate ventilation across the spill zone.

6.2 Environmental Containment

Prevent the fluid from migrating into municipal sewage grids, drainage ditches, surface waterways, or groundwater zones. Contact environmental regulatory authorities if the product compromises public ecological zones.

6.3 Recovery and Clean-Up

Spill Mitigation:	Absorb the liquid utilizing inert, solid mineral binding materials (such as volcanic clay or diatomaceous earth) as rapidly as possible. Gather the contaminated solids into approved, sealed disposal vessels. For minor spills, contain with non-combustible absorbent sheets and transfer mechanically into secure containers. Isolate waste materials cleanly away from incompatible chemical stocks.

SECTION 7: HANDLING AND STORAGE

7.1 Safe Handling Practices

Operational Measures:	Ensure thorough washing of hands and exposed skin areas utilizing mild soap and clean water prior to eating, drinking, or smoking. Implement continuous exhaust ventilation within processing areas to avoid the stagnation of localized vapors. Prevent chemical contact with eyes or skin.
Hygiene Controls:	Refrain from consuming food items or using tobacco products within chemical zones. Wash protective garments thoroughly post-handling.

7.2 Storage Requirements

Safe Storage Configurations:	Keep contained exclusively within the original manufacturer packaging. Store in a chilled, thoroughly ventilated environment kept away from direct sunlight exposure and high-intensity heat sources. Keep storage caps locked airtight when not in service.
Thermal Limits:	Product may drop into a solid physical state at environmental temperatures descending below -36°C (-34°F).
Prohibitions:	Do not store alongside consumer food stocks, animal feed, medications, or municipal drinking water reservoirs. Never subject empty or filled containers to cutting, drilling, welding, or open flame treatments. Keep isolated from strong acids, basic solutions, and powerful oxidizing agents.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Ethylene Glycol (CAS: 107-21-1):	
ACGIH TWA (Vapor Fraction):	25 ppm
ACGIH STEL (Vapor Fraction):	50 ppm
ACGIH STEL (Inhalable Fraction / Aerosol Only):	10 mg/m³
Critical Notation:	Identified as an upper respiratory tract and ocular irritant.
Diethylene Glycol (CAS: 111-46-6):	No official ACGIH exposure metrics established.
Denatonium Benzoate (CAS: 3734-33-6):	No official ACGIH exposure metrics established.
potassium 2-ethylhexanoate (3164-85-0):	No official ACGIH exposure metrics established.
sodium 2-ethylhexanoate (19766-89-3):	No official ACGIH exposure metrics established.

8.2 Engineering Controls

Mechanical Systems:	Deploy localized mechanical ventilation to prevent airborne concentrations from exceeding defined thresholds. Maintain functional eyewash infrastructure and decontamination showers near hazardous workstations.

8.3 Individual protection measures, such as personal protective equipment

General PPE Standard:	Minimize unnecessary direct exposure to all chemical mixtures.
Hand Protection:	Wear sturdy chemical-resistant gloves (such as neoprene, nitrile, or butyl rubber configurations).
Ocular Protection:	Use chemical splash goggles or integrated safety glasses with wrap-around side shields.
Respiratory Protection:	Not required during normal operational routines. If processing activities generate vapors or mists exceeding exposure limits, deploy an approved air-purifying respiratory device.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Fundamental Chemical Metrics

Physical State:	Liquid
Coloration:	Red
Odor Profile:	Mild
Odor Threshold	No data available
Molecular Mass (Base Agent)	Not Applicable (Chemical Mixture)
pH Range (50% Volume Solution)	9
Relative Evaporation Rate (Butyl Acetate = 1)	Nil
Freezing Point Threshold:	-36°C (-34°F)
Boiling Point Threshold:	108°C (226°F)
Flash Point (Concentrate Base):	None
Auto-Ignition Temperature (Concentrate Base):	400°C (752°F) [100% Ethylene Glycol] Literature
Decomposition Temperature	No data available
Flammability (Solid, Gas)	No data available
Vapor Pressure Metric:	Less than 0.1 mm Hg @ 20°C
Relative Vapor Density @ 20°C	No data available
Specific Gravity:	1.07 to 1.09
Density Metric:	1.07 to 1.09 kg/l (8.92 to 9.09 lbs./gal)
Solubility:	Fully miscible and complete within water mediums
Log Pow	No data available
Log Kow	No data available
Viscosity, Kinematic	No data available
Viscosity, Dynamic	No data available
Explosive Limits	3.2 percent to 15.3 percent by volume
Explosive Properties	No data available
Oxidizing Properties	No data available
Volatile Organic Compound (VOC) Percentage	0 percent

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical Reactivity

No hazardous reactions manifest when handled under standard operational profiles.

10.2 Structural Stability

Chemically stable under standard ambient temperature and storage parameters.

10.3 Hazardous Polymerization

Will not undergo hazardous polymerization or dangerous secondary reactions

10.4 Environments to Avoid

Exposure to extreme thermal peaks, open flame paths, sparks, or localized ignition arrays.

10.5 Incompatible Materials

Keep isolated from robust chemical acids, concentrated bases, and active oxidizing chemicals

10.6 Hazardous Decomposition Yields

Thermal breakdowns can generate carbon monoxide, carbon dioxide, volatile aldehydes, ethers, alcohols, and irritating fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity Data

	Ethylene Glycol (107-21-1):
Oral LD50 (Rat):	7712 mg/kg bodyweight
Inhalation LC50 (Rat):	Greater than 2.5 mg/l over a 6-hour exposure window (Aerosol format)
Human Acute Oral ATE:	500 mg/kg bodyweight
	Diethylene Glycol (111-46-6):
Oral LD50 (Rat):	19600 mg/kg bodyweight
Dermal LD50 (Rabbit):	11890 mg/kg bodyweight
Acute Oral ATE:	500 mg/kg bodyweight

11.2 Primary Irritation and Target Organs

Skin Classification:	Not officially categorized as a primary dermal corrosive or irritant.
Ocular Classification:	Not officially categorized as a primary eye hazard, though contact may prompt temporary irritation.
Mutagenicity & Carcinogenicity:	No components present at thresholds greater than or equal to 0.1 percent are identified as potential mutagens or carcinogens by IARC, ACGIH, NTP, or OSHA.
Reproductive Toxicity:	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Repeated Exposure):	May generate explicit damage to internal organ frameworks (specifically the kidneys) through extended or repeated oral ingestion pathways.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity Data

	Ethylene Glycol (107-21-1):
LC50 Fish 1:	40,761 mg/l over 96 hours (Static evaluation via Salmo gairdneri)
EC50 Daphnia 1:	Greater than 10,000 mg/l over a 24-hour window.
	Diethylene Glycol (111-46-6):
L C50 Fish 1:	75,200 mg/l over 96 hours (Flow-through evaluation via Pimephales promelas)

12.2 Environmental Degradation

Ethylene Glycol:	Highly biodegradable within water systems and break down rapidly across topsoil matrixes.
Diethylene Glycol:	Fully biodegradable across standard aquatic and soil ecosystems.

12.3 Bioaccumulative Potential

Ethylene Glycol:	Bioconcentration Factor (BCF) is documented at 10.0 over 72 hours (Leuciscus idus). Log Pow stands at minus 1.34. This indicates a very low potential for bioaccumulation.
Diethylene Glycol:	Log Pow is documented at minus 1.98, displaying non-bioaccumulative traits

12.4 Soil Mobility

Highly mobile within soil layers due to complete water miscibility characteristics.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Guidelines

Waste Disposal Recommendations:	Dispose of contents and containers in an authorized waste collection point in full compliance with local, regional, national, and international regulations. Avoid release to the environment. Do not dispose of waste into sewer systems, storm drains, or natural waterways.
Empty Package Handling:	Empty containers retain product residue (liquid and vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner or properly disposed of.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT) Profile

Bulk Containers (Meeting or exceeding 10,000 lbs. / 1,111 Gallons):	
UN Number (DOT):	UN3082
Proper Shipping Name:	Environmentally hazardous substances, liquid, n.o.s. (Contains Ethylene Glycol)
Hazard Class:	Class 9 (Miscellaneous Hazardous Materials)
Packing Group:	Packing Group III
Reportable Quantity (RQ):	5,000 lbs. (Ethylene Glycol)
Non-Bulk Packages (Standard Drums, Totes, Jugs under 10,000 lbs. / 1,111 Gallons):	
Regulatory Status:	Not regulated as a dangerous good or hazardous material for domestic transit.

14.2 International Transit Rules

IMDG (Ocean Freight):	Not regulated as a dangerous good for international maritime shipping
IATA (Air Freight):	Not regulated as a dangerous good for international air cargo shipping.
Proper Shipping Name (DOT):	Not regulated in individual containers below the reportable quantity threshold. For bulk packages exceeding the reportable quantity threshold: Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol)

14.3 Transport hazard class(es)

Department of Transportation (DOT) Hazard Classes:	Not regulated in individual containers below the reportable quantity threshold. For bulk packages exceeding the reportable quantity threshold: Class 9 - Miscellaneous hazardous material 49 CFR 173.140

14.4 Packing group

Packing Group (DOT):	Not regulated in individual containers below the reportable quantity threshold. For bulk packages exceeding the reportable quantity threshold: PG III

14.5 Environmental hazards

Other Information:	Ethylene Glycol maintains an environmental Reportable Quantity (RQ) threshold of 5,000 lbs. Because this prediluted blend carries a reduced active chemical mass, individual package vessels containing a total product weight equal to or exceeding 10,000 lbs. (equivalent to approximately 1,111 gallons or greater in a single container) are regulated as a DOT Hazardous Substance and must display UN3082 Class 9 placards. Shipments in standard drums, totes, or jugs below this volume boundary are exempt from domestic transit regulations.

SECTION 15: REGULATORY INFORMATION

15.1 United States Federal Rules

Toxic Substances Control Act (TSCA) Inventory Status:	All chemical elements and component ingredients contained within this mixture are actively listed or are explicitly exempted on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory core registry.
SARA Section 313 Emissions Reporting:	This mixture contains Ethylene Glycol (CAS Number: 107-21-1), which is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and Title 40 of the Code of Federal Regulations, Part 372.

15.2 International Regulations

Canada:	This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015). Potassium 2-ethylhexanoate (3164-85-0) and sodium 2-ethylhexanoate (19766-89-3) are listed on the Canadian DSL (Domestic Substances List).

15.3 State Specific Rules

California Proposition 65:	This formulation contains Ethylene Glycol, a chemical known to the State of California to cause birth defects or alternative reproductive developmental harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

Template Revision Effective Date:	June 05, 2026

NFPA Hazard Rating Profile:

Health Hazard:	Level 1 (Materials that can prompt distinct irritation under emergency exposure).
Fire Hazard:	Level 1 (Materials requiring distinct pre-heating environments to ignite).
Reactivity Hazard:	Level 0 (Compounds that remain completely structurally stable under standard fire environments).



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