



SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION.

D-A Lubricant

1340 W. 29th St.
Indianapolis, IN 46208
317/923-5321

CHEMICAL EMERGENCY HOTLINE 800 899-9004

PRODUCT NAME: **KOSTGUARD UNIVERSAL CONCENTRATE**

PRODUCT DESCRIPTION: ENGINE COOLANT

CHEMICAL FAMILY: ETHYLENE GLYCOL ANTIFREEZE

EFFECTIVE DATE: 03/14/08

SUPERCEDES DATE: 03/12/08

Dear Customer:

In compliance with the Superfund Amendments and Reauthorization Act (SARA Title III, Section 313), Federal Hazard Communications Regulations (WHMIS and OSHA 29 CFR 1910.1200) and in the interest of informed use of our product, we are providing you with this Material Safety Data Sheet (MSDS).

This MSDS will be updated regularly to reflect the most recent information in our possession. Please ensure that obsolete MSDS sheets in your files for this part number are discarded.

We THANK YOU for your continued patronage and look forward to providing you with additional quality products and services.

SECTION 2 - HAZARDOUS INGREDIENTS

COMPONENT	CAS #	% WT	PEL	TLV	STEL	UNITS	LC50,PPM	LD50, MG/KG
ETHYLENE GLYCOL	107-21-1	90-95	125	50		PPM		RATI 5840 RABA 9530
DIETHYLENE GLYCOL	111-46-4	0-5	N/A	N/A	- N/A			

EMERGENCY OVERVIEW

CAUTION: This is a green colored viscous liquid. Ingestion can be fatal. Over exposure may cause neurological signs and symptoms. May cause kidney damage. Very toxic in particulate form upon inhalation. If ingested, induce vomiting only under the advice of a physician or poison control center.

SECTION 3 - PHYSICAL DATA

Boiling Pt (@ 760 mmHG): Deg C: 175	Specific Gravity: 1.11 - 1.14
Vapor Pressure (mmHG): 0.10 @ Deg C: 20	% Volatile Volume: 97
Vapor Density (Air=1): 2.1	Evaporation Rate: NIL
Solubility in Water (%WGT.): 100%	Water/Oil Dist Coeff: N/A
Appearance and Odor: Green colored liquid	
Physical State: LIQUID	
PH: 9.2 - 9.7 @ 100% and 10.0 - 10.5 @ 50%	
Freeze Pt Deg F/C: -18C	Threshold Odor, PPM: N/A
Other: N/A	VOC: Lbs/Gal = N/A
Grams/Liter = N/A	Grams VOC/Grams Solid = N/A
% VOC: N/A	

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Classification: Combustible at high temp. NFPA Rating: 1,1,0

Combustion products: Heat, flame, CO₂, CO, traces of aldehydes and organic acids

Flash Point Deg C: NONE COC LEL %: N/A UEL %: N/A

Extinguishing Media: Water Spray, Foam, Dry Chemical, CO₂, Sand, or Earth.

UN/NA/PIN#: UN 3082, RQ Environmentally Hazardous Liquid, N.O.S., 9,111(Ethylene Glycol)

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Special Fire Fighting Procedures

Firefighters should wear self-contained breathing equipment and structural firefighters' protective clothing to provide limited protection.

Treat as a Class B fire. Use water to cool threatened containers.

Auto Ign. Temp Deg F/C: 748/398

Unusual fire and explosion hazards: If used in confined spaces, hazardous vapors may spread, burn or build up in low areas.

Explosion Power: Moderate

Impact Sensitive: No

Burning Rate: Low

Static Sensitive: No

SECTION 5 - HEALTH HAZARD DATA

Product Guide: TLV see Section 2

STEL: see Section 2

Routes of Entry: Skin contact, Eye, Inhalation, Ingestion

Effects of Overexposure:

Acute: may cause respiratory system, skin, and/or eye irritation.

Ingestion: Human poison by ingestion (lethal dose of ethylene glycol for humans reported to be 100 ml.)

Chronic (Cancer) Information: Not classifiable as a human carcinogen. There are inadequate data on which to classify the agent (ethylene glycol) in terms of it's carcinogenicity in humans and/or animals.

Excess inhalation is very toxic in particulate form.

Any suspected carcinogen = or >0.1%: NO

Emergency and First Aid Procedures

Eye: Immediately flush with water for 15 minutes and get medical attention.

Inhalation: If affected, remove to fresh air, administer oxygen and call a physician.

Skin: Wash thoroughly with plenty of water and soap. Get medical attention if irritation develops or persists.

Ingestion: Toxic by ingestion. If swallowed, induce vomiting immediately but only under the advice of medical personnel or poison control center. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Wash soiled clothing before wearing again.

Note to Physicians: Stain for evidence of corneal abrasion or injury. Suggest baseline CBC, UA, ABG, and SMA 12. Suggest baseline electrolytes. Consult standard literature. Use of alcohol may be helpful. Prompt medical attention is important. Delayed treatment may result in fatality. This product is a CNS depressant.

SECTION 6 - REACTIVITY DATA

Stable: YES

Conditions to Avoid: Heat and flame

Incompatibility (Materials to avoid): YES, Combustible when exposed to heat or flame, can react vigorously with oxidants. Glycol grouped chemicals are incompatible with sulfuric acid, nitric acid, caustics, and aliphatic amines.

Hazardous Decomposition Products: YES, Carbon Monoxide, Carbon Dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: NO

Conditions to Avoid: Isolate from oxidizers

SECTION 7 - SPILL OR LEAK PROCEDURES

Listed in SARA Title III, #302: NO #304, Cercla: NO #313: YES

Steps to be taken in case material is released or spilled:

Small Spill: Take up with sand or other noncombustible absorbent material and place into container for disposal. Wear protective clothing.

Large Spill: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Eliminate all ignition sources.

Use plastic or aluminum shovel to transfer absorbed waste material into

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drums. Prevent runoff from entering into storm sewers and ditches which lead to natural waterways.

Report Quantity, Lb: 5000 Kg: N/A TPQ, Lb: N/A

Regulations: OSHA, TSCA, CERCLA, SARA, Clean Air Act Other: N/A

Hazard Waste: NO

NO.:

Disposal Method: In accordance with Federal, State, and Local Regulations.

*** SARA Waste Characteristic: N/A

*** EPA Hazardous Waste Number: N/A

SECTION 8 - SAFE HANDLING AND PROTECTION INFORMATION

Respiratory Protection: Use only in well ventilated areas.

Ventilation - Local: Recommended Special: Avoid Heat/Flame
Mechanical: Required Other: N/A

Protective Gloves: Impervious gloves Eye Protection: Safety Glasses/Goggles

Other Protective Equipment:

Apron impervious to ethylene glycol. If ventilation is inadequate, wear approved respiratory equipment.

Estimated LD50, Mg/Kg: 6000 - 13,000

Estimated LC50, PPM: N/A

Sensitization: YES

Irritant: YES Synergistic Agents: NO

SECTION 9 - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing:

Use only in well ventilated areas. Avoid prolonged or repeated breathing of fumes, vapor, or mist. Avoid contact with eyes and skin. DO NOT take internally. Wash thoroughly after using. In case of accident or illness, consult a physician immediately; show label and/or MSDS.

Keep out of reach of children.

Always read and follow directions on product label.

Other precautions:

More technical information (MSDS) available upon request. For professional industrial use only. Good personal hygiene is important. Empty containers retain residue which can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources; they may explode and cause injury or death.

The information and recommendations provided herein are believed to be accurate as of the date hereof. However, such information and recommendations are provided without warranty of any kind and D-A Lubricant disclaims any and all liability or legal responsibility for use or reliance upon same.
