

Green Antifreeze

SDS Number: 901221

1 PRODUCT AND COMPANY INFORMATION

Product Name: Green Antifreeze
Revision Date: 01/22/2016
SDS Number: 901221
Common Name: Ethylene glycol solution
CAS Number: Blend
Product Code: 901221
Synonyms: Automotive coolant

Company Identification:

Manufactured for:
LYDEN OIL COMPANY
3711 LeHarps Drive
Youngstown, OH 44515

For Product Information: 1-330-792-1100
For Emergencies: 1-800-424-9300
CHEMTREC: 1-800-424-9300 or 1-703-527-3887

2 HAZARDS IDENTIFICATIONSignal Word:**WARNING**Hazard Classes/Categories:

Acute toxicity, Oral category 4.
Specific target organ toxicity – repeated exposure, Category 2.



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Hazard Statement(s):

H302: Harmful if swallowed.

H373: May cause damage to organs (kidneys) through prolonged or repeated exposure.

Precaution Statement(s):

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/fumes/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+313: IF exposed: Call a POISON CENTER or doctor/physician.

P405: Store locked up.

P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:

Health = 1

Fire = 1

Reactivity = 0

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3 COMPOSITION / INFORMATION ON INGREDIENTSIngredients:*Mixture of the substances listed below with nonhazardous additions.*

Chemical Name	CAS Number	Percentage
Ethylene Glycol	107-21-1	90-97
Diethylene Glycol	111-46-6	<5
Water	7732-18-5	<4
Denatonium Benzoate	3734-33-6	30-50 ppm

Any concentration shown as a range is to protect confidentiality or is due to batch variation.*4** FIRST AID MEASURESDescription of First Aid Measures:

Inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.

Skin Contact:

Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor. Wash clothing before reuse.

Eye Contact:

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

Ingestion:

DO NOT induce vomiting, seek medical attention immediately. Do not give anything by mouth to an unconscious person. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to victim to further dilute the chemical.

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Symptoms and Effects, both acute and delayed:

Causes damage to organs (kidneys) Oral.
Causes skin irritation.
Causes serious eye damage.
Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

5 FIRE FIGHTING MEASURESRecommended Fire-Extinguishing Equipment:

Water, water fog, water spray, alcohol foam, dry chemical or carbon dioxide.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

6 ACCIDENTAL RELEASE MEASURESPersonal Precautions:

Avoid eye contact. Avoid repeated or prolonged skin contact.
Personal protective equipment must be worn.

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Avoid contact with skin, eyes or clothing. Keep unprotected persons away.

Emergency Procedures:

Contain spilled material, collect in suitable and properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system. Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

Cleanup Procedures:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

7 **HANDLING AND STORAGE**Handling Precautions:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

Storage Requirements:

Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -18 °C (0 °F). Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty. Do not store near food, foodstuffs, drugs or potable water supplies.

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8 EXPOSURE CONTROLS / PERSONAL PROTECTIONExposure Limits:

-107-21-1 Ethylene Glycol (90-97%):

ACGIH TWA – 10 mg/m³Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Have an eye wash station near by.

Personal Protective Equipment:

- General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.
Store protective clothing separately.
Avoid contact with the eyes and skin. Wear gloves and goggles.

- Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

9 PHYSICAL AND CHEMICAL PROPERTIES

Color:	Green
Physical State:	Liquid
Odor:	Mild
Odor Threshold:	Data not available
pH:	10.5-11 (50% solution in water)
Melting Point:	-18°C / 0°F
Boiling Point:	154°C / 317°F
Boiling Range:	Data not available
Flash Point:	116°C / 241°F
Evaporation Rate:	Data not available
Flammability:	Data not available



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Flammability Limits:	Data not available
Vapor Pressure:	<0.1 mmHg at 20° C
Vapor Density:	Data not available
Relative Density:	1.12
Solubilities:	Soluble in water
Partition Coefficient:	Data not available
Auto-Ignition Temperature:	Data not available
Decomposition Temperature:	Data not available
Viscosity:	Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.

Conditions to Avoid:

Extreme temperature, sparks, open flame, and direct sunlight.

Hazardous Reactions:

No known hazardous reactions.

Incompatible Materials:

Strong oxidizers, acids, and bases.

Decomposition Products:

Oxides of carbon.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

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Exposure Effects:

Harmful in swallowed.
Causes skin irritation.
Causes serious eye damage.
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Measures of Toxicity:

-ethylene glycol (107-21-1):
LD50 oral rat: > 5,000.00 mg/kg (Rat; Literature study)
ATE US (oral): 500.00 mg/kg bodyweight
-diethylene glycol (111-46-6):
LD50 dermal rabbit: ATE US (oral) 500.00 mg/kg bodyweight
ATE US (dermal) 11,890.00 mg/kg bodyweight
-denatonium benzoate (3734-33-6):
LD50 oral rat: 584.00 mg/kg (Rat; Literature study)
LD50 dermal rabbit: > 2,000.00 mg/kg (Rabbit; Literature study)
ATE US (oral) 584.00 mg/kg bodyweight

Carcinogenic/Mutagenic Precautions:

Non-carcinogenic and not expected to be mutagenic.

12 ECOLOGICAL INFORMATIONEcological Precautions:

Avoid exposing to the environment.

Ecological Effects:

No specific environmental or aquatic data available.



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13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Dispose of waste material in accordance with all local, state, and federal requirements.

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

UN Number:

UN3082

UN Shipping Name:

Environmentally hazardous substances, liquid, n.o.s.

Transport Hazard Class:

9

Packing Group:

III

Environmental Hazards:

Data not available

Bulk Transport Guidance:

Data not available

Special Precautions:

Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.



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16	OTHER INFORMATION
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Last Revision Date: 01/22/2016

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