

MATERIAL SAFETY DATA SHEET
ENVIROGUARD ANTIFREEZE/COOLANT

HAZARD RATING

Health: 0 Flammability: 1 Reactivity: 0 * Personal Protection: 0

1. 1. GENERAL

Trade Name: ENVIROGUARD
Chemical Family: Glycol
Generic Name: Propylene Glycol (Propylene Glycol with Dionized water when premixed)

DOT Hazmat proper
Shipping Name: Not regulated
DOT Hazard Class: Not regulated
CASE NO: See Section 9 UN/NA ID NO. N/AP

2. 2. CAUTION

SUMMARY OF HAZARDS

Physical Hazards: Slightly Combustible liquid

Acute Health Effects: Slight Eye irritant
(Short term) No inhalation hazard identified from data found
 No skin absorption hazard identified from data found
 No skin irritation identified from data found
 No ingestion hazard identified from data found
 All of above are conditioned for intended use of product

*Purchasers should review personal protection recommendations. Workplace conditions are an important factor in specifying adequate protection.

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2. 2. CAUTION (CONT'D)

SUMMARY OF HAZARDS

Chronic Health Effects: No chronic health effects are expected from normal use.

3. 3. FIRE AND EXPLOSION

Flash Point:	AP 211 degrees F
Autoignition Temp:	AP 700 degrees F
Flammable Limits - Atmospheric Temp & Pressure	Normal
(% Volume in air)	Lower AP – 2.4 Upper AP – 17.4
Fire and Explosion:	Heat from fire can generate flammable vapor when mixed with air and exposed to ignition source. Vapors can explode if confined. Vapors may travel long distances along ground before igniting/flashing back to vapor source. Fine sprays/mist may be combustible at temperatures below normal flash point. See supplement for hazards of aqueous solutions.
Extinguishing Media:	Dry chemical, CO2, Alcohol type foam.
Special Fire Fighting Procedures:	Do not enter fire area without proper protection. See “decomposition products possible” Fight fire from safe distance in a protected location. Heat may build pressure and rupture closed containers, spreading fire and increasing the risk of burns and injuries. Use water spray/fog for cooling. Avoid frothing/steam explosion. Burning liquid may float on water. Although soluble, may not be practical to extinguish fire by water dilution. Notify authorities if liquid enters sewer/public waters.

4. 4. HEALTH HAZARDS

Summary of Acute Hazards:

Slight Health hazard – See below for route-specific details.

ROUTE OF EXPOSURE

SIGNS AND SYMPTOMS

Inhalations	No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of inhalation exposure.
Eye Contact	may cause minor eye irritation
Skin Absorption	No significant signs or symptom indicative of any adverse health hazard are expected to occur as a result of skin exposure.
Skin Irritation	No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of skin exposure.
Ingestion	no significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of ingestion
Summary of chronic Hazards and special Health effects.	No chronic health effects are expected from normal use. This material or its emissions may aggravate pre-existing eye disease

5. 5. PROTECTIVE EQUIPMENT AND OTHER CONTROL MEASURES

Respiratory: NP special respiratory protection equipment is recommended under anticipated conditions of normal use with adequate ventilation.

PROTECTIVE EQUIPMENT AND OTHER CONTROL MEASURES CONT'D

Eye: Eye protection such as chemical splash goggles and/or face shield should be worn when the possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor. Contact lenses should not be worn.

Skin: Not normally considered a skin hazard. When in contact with skin, wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work.

Engineering Controls: No special ventilation is recommended under anticipated conditions of normal use beyond that needed for normal comfort control.

Other Hygiene And Work Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using soap and water. No special work practices are needed beyond the above recommendations under anticipated conditions of normal use.

6. 6. OCCUPATIONAL EXPOSURE LIMITS

- No established standards

7. 7. EMERGENCY AND FIRST AID

- Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Eye Contact: In case of eye contact immediately rinse with clear water for 20 to 30 minutes, retracting eyelids often. Obtain emergency medical attention if pain, blinking, tears or redness persists.

Skin Contact: Not expected to present a significant skin hazard under anticipated conditions of normal use.

Ingestion: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

Emergency Medical Treatment Procedures: After adequate first aid, no further treatment is required unless symptoms reappear.

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8. SPILL AND DISPOSAL

Precautions if Material is Spilled or Released may contaminate water supplies/pollute public waters. Evacuate/limit access. Equipment responder with proper protection to prevent flow to sewers or public waters. Stop release. Notify environmental authorities. Restrict water use for cleanup – slippery walking conditions. Spread granular cover. Impound/recover large land spill, soak up small spill with inert solids. Use suitable disposal containers. On water material is soluble and may float or sink. May biodegrade. Contain/minimize dispersion. Disperse residue to reduce aquatic harm. Report per regulatory requirements.

SPILL AND DISPOSAL CONT'D

Waste Disposal Methods : Landfill solids at permitted sites. Use registered transporters. Burn concentrated liquids, diluting with clean low viscosity fuel. Avoid flameouts assure emissions comply with applicable regulations. Dilute aqueous waste – may biodegrade. Avoid overloading/poisoning plant biomes. Assure effluent complies with applicable regulations. Soil or water should not be designated RCRA hazardous waste.

9. 9. COMPONENTS

<u>COMPONENT NAME</u>	<u>CAS NO.</u>	<u>CARCINOGEN#</u>	<u>COMPOSITION WT.</u>
Propylene Glycol	57-55-6	N/AP	99%

10. 10. LABEL INFORMATION

Manufacturer: MARCUS PRODUCTS COMPANY
Use Statement: For industrial use only. Keep out of reach of children
Signal Word: Caution
Physical Hazards: Combustible
Health Hazards: Eye irritant
Precautionary Measures: Do not handle near heat, sparks or open flame
Avoid contact with eyes
DOT Information; UN/NA ID# - N/AP
Hazard Class: Not regulated
Proper Shipping: Not regulated
In case of Fire: Use dry chemical, Co2, Alcohol type foam

First Aid:	
Inhalation:	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Eye Contact:	In case of eye contact, immediately rinse with clear water for 20 to 30 minutes, retracting eyelids often. Obtain emergency medical attention if pain, blinking, tears or redness persists.
Skin Contact:	Not expected to present a significant skin hazard under anticipated conditions of normal use
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use
Protective Equipment:	
Respiratory:	No special respiratory protection normally required when used with adequate ventilation
Eye;	Chemical splash goggles and/or face shield
Skin:	No special clothing normally required. When use results in skin contact, wash thoroughly before eating, drinking, smoking or leaving work

11. SUPPLEMENT

Regulatory Information:

SARA TITLE III

Section 311/312 Hazard Categories: None Apply

Section 313: No chemical in this product exceed the de minimus reporting level established by SARA 313 and 40 CFR 372.

Supplement to Sections II and IV Health Hazards

Acute Health Effects: One literature report indicates rare eczematous skin reactions and even more rarely an allergic skin reaction from exposure to propylene glycol. (Anderson and Starr, Hautzart 33 (1): 1982

Supplement to Sections I and III Fire and Explosion Hazards

Flammability of aqueous solutions of propylene glycol greater than 22% by weight. If heated sufficiently, will produce flammable vapors. Only aqueous solutions of propylene glycol less than 22% should be used in sprinkler systems or other fire-fighting equipment. Always drain and flush systems containing propylene glycol with water before welding or other maintenance.

National Paint and Coatings Associations Hazardous material ID System:

Health	0
Flammability	1
Reactivity	0
* Personal Protection	0

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