

PAH|NOL GOLD ALL PURPOSE ANTIFREEZE

This product is formulated with the latest organic acid technology to create a high quality extended life ethylene glycol antifreeze/coolant for newer model cars and heavy duty trucks. It's special blend of long-lasting inhibitors is designed to protect all engine components, including aluminum, for a minimum of five years or 300,000 miles, when used as directed.

Typical Composition	% by Weight
Ethylene Glycol, Antifreeze Grade	95.0%
Corrosion Inhibitors (some hydrated)	4.0 Max.
Total Water, (ASTM D1123)	4.0 Max.
Antifoam and Gold Dye	Included
Typical Properties	
Color	Gold
Clarity	Clear, single phase
Specific Gravity, 60/60°C, (ASTM D1122)	1.12 – 1.14
pH, 50% by volume, (ASTM D1287)	8.0 min.
Flash Point (Tag Open Cup), (ASTM 1310)	250°F
Ash, (ASTM D1119)	2% by wt. max.
Foam Test, (ASTM D1881)	
Foam Volume	50 ml. max.
Break Time	3.0 seconds
Boiling Point, (ASTM D1120)	
33.33% by volume in water	220°F min.
50.00% by volume in water	226°F min.
Freezing Point (ASTM D1177)	
33.33% by volume	0°F max.
50.00% by volume	-34°F max.
60.00% by volume	-62°F max.

GENERAL INFORMATION

Use Recommendation - For long life and best corrosion protection, the coolant mix should be 50% **PAH|NOL GOLD** combined with 50% pure, clean water. (If water quality is questionable, we recommend distilled water). This provides freezing protection to -34°F, and boil-over protection to +265°F, using a 15 pound pressure radiator cap. For extreme conditions, **PAH|NOL GOLD** can be used to a maximum of 70% with 30% pure water, providing freezing protection to -84°F, and boil-over protection to +276°F (Do not use more than 70% antifreeze).

Using poor quality water reduces the effective life to that of conventional coolant to 24,000 miles or two years, whichever comes first.

Not for HVAC systems, recreational vehicles, and protection of other hydronic systems. (Consult us for appropriate product recommendations.)

Applicable Specification - Exceeds the requirements of ASTM D3306, ASTM D4985, SAE J1034, SAE J1941, and Federal Specification OA548D; satisfies both hot surface aluminum protection requirements of ASTM test D4340, and Cummins heavy duty low silicate requirements, and is compatible with GM 6277M DEX-COOL.**

Hoses and Gaskets - No adverse effect on gaskets, hoses, or automotive finishes.

Cautionary Information - Ethylene Glycol, the major component of Pah|nol Gold, is poisonous to humans and animals when ingested. Store only in closed containers with complete cautionary warning information thereon, in a cool, secure place, out of reach of children. Do not use in any system connected with portable water. Ask us about Houghton Chemical products specifically designed for this purpose.

Pah|nol Metal Protection (Corrosion Weight Loss Data, mg per test coupon, typical)

	ASTM D1384		ASTM D2570		ASTM D4340*	
	Max. Loss Allowed	Pah nol	Max. Loss Allowed	Pah nol	Max. Loss Allowed	Pah nol
Copper	10	3	20	2		---
Solder	30	2	60	2		---
Brass	10	3	20	1		---
Steel	10	0	20	0		---
Cast Iron	10	1	20	1		---
Aluminum	30	8	60	1	1.0	0.2

* Corrosion of aluminum under heat-rejecting conditions expressed in milligrams per square centimeter per week.

** DEX-COOL is a Trademark of GM Corporation

Specifications/pahnol.c