



Heavy-Duty Conventional Inhibitor 2792

Formulated for heavy-duty diesel engines.

Penray 2792 is an advanced “fully-formulated” inhibitor package featuring a low-silicate, phosphate-free formula to provide trouble-free service in trucks, buses and additional applications listed below.

Antifreeze/coolant made with glycol consistent with ASTM E1177-14 and Penray 2792 is compatible with CAT EC-1 and other specifications listed below. Penray 2792 offers easy, economical, efficient blending procedures. A concentrated formula, Penray 2792 is added to pure ethylene glycol at 2.2% volume to achieve the product specifications and benefits. Adding an additional 2% of water is optional to minimize product cost. The finished product will meet ASTM heavy-duty specifications and may also be used in diesel engines with traditional supplemental coolant additive.

Store above 50° F (10° C) to prevent gelling.

Blending Instructions:	50/50	Pre-dilute coolant contains 1.1% by volume of 2792
	Concentrate	Contains 2.2% by volume of 2792



BENEFITS

- Cost effective alternative to ELC
- Single system technology offers the easiest method of manufacturing
- Phosphate & amine free
- Lubricity agents extend water pump life
- Fill-for-Life[®] program when used with Penray Need Release[®] filter
- Meets OEM performance specifications

APPLICATIONS

- Gen-sets
- Stationary engines
- Line heaters
- Natural gas compressor engines
- Irrigation equipment
- Air compressor engines
- Drilling equipment

SPECIFICATIONS

- ASTM D-6210
- ASTM D-3306
- TMC RP-323

Using and maintaining a properly formulated coolant is one of the most important aspects of engine maintenance.





Penray 2792 @2.2% in 95.8% Ethylene Glycol and 2% Water
ASTM D-3306 and D-4985 Specifications

Property	ASTM Test Method	ASTM Specification	Penray 2792 Performance	
Specific Gravity @ 60 °F	D-1122	1.110 – 1.3145	1.123	
Freezing Point °F (°C)	D-1177	50 Vol % in Distilled Water: -34 °F (-36 °C) Max or Lower	50 Vol % in Distilled Water: -38 °F (-39 °C)	
Boiling Point ^A °F (°C)	D-1120	325 °F (163 °C) Min	355 °F (180 °C)	
Effect: Automotive Finish	D-1882	No Effect	No Effect	
Ash Content, Mass %	D-1119	5% Max	0.6%	
pH: 50 Vol % in Water	D-1287	7.5 – 11	10.9	
Chloride, PPM	By IC	25.0 Max	2	
Water, Mass %	D-1123	5 Max	1.9	
Reserve Alkalinity, ml	D-1121	Report ^B	6.7	
Foaming Volume, ml	D-1881	150 Max	60 mA	
Break Time, seconds		5 Max	1.6 sec	
Corrosion in Glassware	D-1384			
Weight Loss, mg/specimen				
Copper		10 Max	0	
Solder		30 Max	3	
Brass		10 Max	1	
Steel		10 Max	0	
Cast Iron		10 Max	0	
Aluminum		30 Max	-1	
Simulated Service Weight Loss, mg/specimen		D-2570		
Copper		20 Max	-1	
Solder		60 Max	-1	
Brass		20 Max	0	
Steel		20 Max	0	
Cast Iron		20 Max	0	
Aluminum	60 Max	-1		
Corrosion of Cast Aluminum Alloys at Heat Rejecting Surfaces mg/cm ² /week	D-4340	1.0 Max	0.1	
Cavitation Erosion Rating: Pitting, Cavitation or Erosion of the Water Pump	D-2809	8 Min	9	

^A Some precipitate may be observed at the end of the test. This should not be cause for rejection.

^B Agreed value between supplier and customer

Antifreeze made with virgin ethylene glycol and Penray 2792 @2.2% by volume will yield antifreeze meeting the following performance specifications;

- Caterpillar HD coolant
- Peterbilt, Kenworth
- Ford ESE-M97B44-A
- Mack
- Volvo
- Cummins CES14603/90T8-4
- GM 1825M
- MTU5048
- Detroit Diesel 93K217
- Freightliner 48-22880
- John Deere H24A1/H24C1

Product Weight: 585 lbs/53 gallons

