

DESCRIPTION

COOLANT LLO is a premium quality, organic, long life anti boil/anti-freeze coolant concentrate. COOLANT LLO is based on carboxylate technology and contains no silicates, borates, phosphates, nitrites, nitrates or amines. It is suitable for both automotive and heavy-duty diesel engines.

COOLANT LLO contains 90% monoethylene glycol and a double inhibitor package ensuring ultimate corrosion protection and extended service life. Anti-boil and anti-freeze protection is equally afforded with a substantially higher rust and corrosion protection than competitor products. It is the ultimate in up to date coolant technology.

COOLANT LLO protects all metals found in cooling systems and gives excellent protection against cavitation's erosion and wet-sleeve liner pitting. It significantly increases the operating life of water pumps and exceeds corrosion performance levels required to meet Australian Standard AS2108.1-2004 and numerous performance specifications of OEM's including Ford & GMH. This coolant has been independently verified to all relevant ASTM's for automotive and heavy duty diesel use.

Provides maximum protection against 'hot spot' corrosion, common in aluminium cylinder heads.

COOLANT LLO has a service life of up to 5 years / 500,000kms* in automotive applications and up to 6 years / 600,000kms / 6,000hrs* in heavy duty diesels. This has obvious environmental advantages as a result of fewer coolant changes. There are no deleterious effects on hoses or gaskets. (* at 50/50 dilution ratio)

Has a proven record over many years with marine engines, mining equipment, taxi fleets, government departments, bus companies and several large fleet truck companies. Meets the phosphate-free requirements of European Manufacturers and the silicate-free requirements of Japanese Manufacturers.

TYPICAL PROPERTIES

Appearance:	Mobile Liquid (Available in Green, Red)
pH (50/50 vol/vol):	7.7 – 8.6
Glycol by Weight (gm/L):	1003
Density:	1.1103 kg/L (Concentrate)
Freezing Point:	-36.2°C (50% by vol)
Boiling Point:	108.2°C (50% by vol) (at atmospheric conditions, boiling point up to 130°C with 105 kPa radiator cap)
Reserve Alkalinity (mL):	4.6
Hazard Class:	Hazardous Substance
DG Class:	Non Dangerous Goods
Glassware Corrosion Test:	Pass (ASTM D-1384)
Aluminium Corrosion Test:	Pass (ASTM D-4340)
Water Pump Cavitation Test:	Pass (ASTM D-2809)
Foaming Tendencies Test:	Pass (ASTM D-1881)
Cummins Anti Scale Test:	Pass (per AES 14603)

TEST RESULTS

ATSM D 1384 – GLASSWARE CORROSION TEST		
Metal	Allowable Weight Loss	Typical Weight Loss
Copper	10mg / coupon	0
Solder	30mg / coupon	0.05
Brass	10mg / coupon	0.01
Steel	10mg / coupon	0
Cats Iron	0.03	
Aluminium	0.14	
ASTM D 4340 – ALUMINIUM HEAT REJECTION TEST		
Allowable Weight Loss	Typical Result	
1.0mg / cm ² / week	-0.01	
ASTM D2809 – CAVITATION EROSION CORROSION		
Rating (minimum)	HDD Coolant	
8	8	

SPECIFICATIONS

AFNOR NFR 15-601	Daimler Chrysler MS-7170	Mercedes Benz Spec. 325.0
Alfa Romeo - Parafu UP	Daimler Chrysler MS-9769	Mitsubishi FUSO Genuine Diesel LL Coolant
AS 2108.1 : 2004 Type A	Dennis Eagle Fleetguard	Powercool FUSO SAE J814-C
ASTMD3306	Freightliner Fleet Charge	Saab Scania® 6901
ASTMD3306, D4656, D4985	GM 1825 M	SAE 3 1034 and JASO N 324
Audi Skoda Volkswagen - G12 G13	GM 1899 M	SAE 31034, SAE 31941
BMW N 600 69.0	Hino Genuine LL Coolant	Suzuki - Ethylene Glycol Coolant
BS 6580	Isuzu (GN6277M & HN2217)	Toyota - K2601G, K2601-1G
Caltex CX Engine Coolant	IVECO Parafu 11 IVECO GM6038M IVECO AC9-50	Toyota K2601G - 1G
Castrol Antifreeze NF	Japanese GIS K 2234 Jenbacher	UD Long Life Coolant (Nissan)
Caterpillar 1 EO 535	Kenworth ALLCool Komatsu KES 07.892	Volvo
Caterpillar ELC	Liebherr MD 1-36-130	Volvo VCS
Citroen 9979.70/71/72	Mack VCS Coolant	VW - G12 , G12, G11, TL-774-C
Cummins 3666132	MAN 324 SNF / 248	Waukesha 4-1974D
DAF 742002 DAF BTPS 606A DAF DCEA 615	Mercedes Benz 325.5	Western Star ASTM D6210

- Safety Data Sheet for this product can be obtained by visiting TriTech Lubricants Website www.tritechlubricants.com
- All Packages should be stored under cover to avoid water contamination and fading. Products should not be stored over 60°C