

Long Life OAT Coolant is an ethylene glycol based engine coolant concentrate, which uses Organic Acid Inhibitor Technology and is free from nitrites, amines, phosphates, borates and silicates. BTC Classification Type 4E. Fleet trials have shown that when used at the correct concentration coolants based on Organic Acid Inhibitor Technology continues to provide effective corrosion protection for up to 250,000 km for passenger cars and 500,000km in commercial vehicles. It is recommended that the coolant is replaced when the above mileages have been reached or after 5 years whichever is the sooner. Unlike traditional coolants which employ inorganic inhibitors, Long Life OAT Coolant has excellent hard water stability and very low inhibitor depletion rates.

Physical Properties

Parameter		Method		ASTM D3306
Appearance		Visual	Clear red – orange liquid free from suspended matter	Not Specified
Specific Gravity 15/15°C		ASTM D 4052	1.125	1.110 – 1.145
Equilibrium Reflux Boiling Point °C		ASTM D 1120	174	163 min
Freezing Point °C (50% Dilution by vol.)		ASTM D 1177	-40	-37 max
Freezing Point °C (33% Dilution by vol.)		ASTM D 1177	-20	
pH (50% vol.)		ASTM D 1287	8.0	7.5 – 11.0
Reserve Alkalinity 0.1N HCl		ASTM D 1121	7.5	Report
Water Content		ASTM D 1123	3.0	5 max
Foaming Properties	Vol. (ml)	ASTM D1881	45	150 max
	Break (s)		2	5 max

Corrosion Protection

ASTM D1384 Glassware Corrosion Test Results.

	Weight Loss mg/ Coupon					
	Copper	Solder	Brass	Steel	Cast Iron	Aluminium
ASTM D3306 (max)	10	30	10	10	10	30
EXLC 5	1.0	0.6	-0.7	1.9	0.1	-0.7

ASTM D 4340 Corrosion of Aluminium under heat rejecting conditions

	Weight Loss mg/ cm ² /week
ASTM D 3306 (max)	1.0
EXLC 5	0.2

ASTM D2570 Simulated Service Corrosion Test

	Weight Loss mg/ Coupon					
	Copper	Solder	Brass	Steel	Cast Iron	Aluminium
ASTM D2570 (max)	20	60	20	20	20	60
EXLC 5	2	3	2	2	1	5

ASTM D2809 Cavitation Corrosion Characteristics of Aluminium Pumps

	Visual Rating
ASTM D 2809 (min)	8
EXLC 5	9

(The above figures are typical values and do not constitute a specification.)

Freeze Protection

	Concentration by Volume %				
	25	33	40	50	60
Specific Gravity 20/4°C	1.040	1.055	1.073	1.086	1.100
Freeze Protection * °C	-12	-22	-27	-40	-56

**Average of Freezing Point and Pour Point*

Performance Standards

Long Life OAT Coolant exceeds the requirements of most European and International Standards including:

ASTM D3306
 ASTM D 4985
 SAE J 1034
 BS 6580 (2010)
 AFNOR NF R15-601 *
 FFV Heft R443
 CUNA NC 956-16
 UNE 26361 - 88
 JIS K 2234 *
 NATO S 759

(with the exception of reserve alkalinity)*

It also meets the performance requirements of the following OEM specifications:

Chrysler MS 9176
 Cummins CES 14603
 Ford ESE M97B49-A, WSS-M97B44-D & ESD M97 B49-A
 GM 1899 M, US 6277 M & OPEL GM QL130100
 John Deere H 24 B1 & C1
 Leyland Trucks LTS 22 AF 10
 Mack 014GS 17004
 MAN 248, 324 (SNF) & B&W D 36 5600
 Mercedes MB 325.3
 Renault 41-01-001 - D
 VAG TL 774 D/F
 VOLVO VCS

Compatibility with other coolants

Long Life OAT Coolant is compatible with other ethylene glycol based coolants and can be safely mixed with them. As Long Life OAT Coolant employs an inhibitor technology that is significantly different from that used in traditional coolants we recommend that prior to using Long Life OAT Coolant in systems previously filled with a traditional coolant that the cooling system is drained and flushed with clean water before filling with Long Life OAT Coolant diluted in accordance with the vehicle manufacturers instructions to ensure optimum performance and durability. Failure to do so can significantly reduce the working life of the Long Life OAT Coolant. In the absence of a vehicle manufacturer's advice we would recommend a 50% dilution of Long Life OAT Coolant in good quality water.

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