

AC-9 COOLANT

PRODUCT DATA SHEET

Long Life Organic Engine Coolant Type A

Organic Acid Technology (OAT) Coolant - (Monoethylene Glycol)

Use - AC-9 is a premium grade long life organic coolant for use in all makes and models of vehicle including automotive and heavy duty diesel

PRODUCT INFORMATION

AC-9 is a premium quality, organic, long life anti boil/anti freeze coolant concentrate. AC-9 is based on carboxylate technology and contains no silicates, borates, phosphates, nitrites, nitrates or amines. AC-9 is suitable for both automotive and heavy duty diesel engines.

AC-9 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. AC-9 is the ultimate in up to date coolant technology.

AC-9 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.

AC-9 has a service life of up to 10 years / 1,000,000kms* 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.



TYPICAL PROPERTIES

Appearance:	Mobile liquid (Available in Green, Red, Blue or Yellow)
pH (50/50 vol/vol):	7.7 - 8.6
Specific Gravity:	1.1103 kg/L (Concentrate)
Glycol by Weight (gm/L):	1.0035
Freezing Point:	-36.2°C (50% by Vol.)
Boiling Point:	108.2°C (50% by Vol.)
Reserve Alkalinity (mL):	4.6
DG Class:	Non Dangerous Goods
Hazardous:	Yes
Glassware Corrosion Test:	Pass (ASTM D-1384)
Aluminum 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)

Non DG



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TEST RESULTS

ASTM D 1384 - GLASSWARE CORROSION TEST

<u>Metal</u>	<u>Allowable Weight Loss</u>	<u>Typical Weight Loss AC-9</u>
Copper	10mg / coupon	0.00
Solder	30mg / coupon	0.05
Brass	10mg / coupon	0.01
Steel	10mg / coupon	0.00
Cast Iron	10mg / coupon	0.03
Aluminium	30mg / coupon	0.14

ASTM D 4340 - ALUMINIUM HEAT REJECTION TEST

<u>Allowable Weight Loss</u>	<u>Typical Result AC-9</u>
1.0mg / cm ² / week	-0.01

ASTM D2809 - CAVIATION EROSION CORROSION

<u>Rating (minimum)</u>	<u>AC-9</u>
8	8

PRODUCT CODES / QUANTITIES

Available AC-9 Concentrate

A/AC9/1	1L Plastic Bottle (Carton of 12)
A/AC9/2.5	2.5L Plastic Bottle (Carton of 6)
A/AC9/5	5L Plastic Bottle (Carton of 4)
A/AC9/20	20L Plastic Cube
A/AC9/200	200L Metal Drum
A/AC9/IBC	1,000L IBC

Available AC9-50 in Premix 50%

A/AC9-50/1	1L Bottle (Carton of 12)
A/AC9-50/5	5L Bottle (Carton of 4)
A/AC9-50/20	20L Plastic Cube
A/AC9-50/200	200L Metal Drum
A/AC9-50/IBC	1,000L IBC (Premixed with Demineralised Water)

AC-9 Red, Blue or Yellow Coolant (Concentrate or Premix)

A/AC9COLOUR/5	5L Plastic Bottle (Box of 4)
A/AC9COLOUR/20	20L Plastic Cube
A/AC9COLOUR/200	200L Metal Drum
A/AC9COLOUR/1000	1,000L IBC

SPECIFICATIONS (Cars)

AC-9 coolant is recommended in vehicles where the following performance levels are required;

AS 2108.1 : 2004 Type A	Daewoo - Ethylene Glycol Coolant	Lexus Toyota - Super LL Coolant
AFNOR NFR 15-601	Daihatsu - Ethylene Glycol Coolant	Mazda - Ethylene Glycol Coolant,
ASTM D3306, D4656, D4985	Dodge - Mopar HOAT	Mazda - FL22
BS 6580	FIAT - Paraflu UP	Mercedes Benz 325.0, 326.0
SAE J1034, SAE J1941	Ford - ESE M97B44-A, WSS M97B44	Mitsubishi - Long Life Coolant
Castrol Antifreeze NF	Ford - ESE M97-B18C, ESE	Nissan - EG Long Life Coolant
Caltex CX Engine Coolant	Glysantin G05, G12 ⁺ , G30, G33, G34	Nissan - NES 5059 LLC, NES M 5509
GM 1825 M	Holden - GM6277M, GM1899M	Peugeot - Procor 2000 Glysantin G33
GM 1899 M	Holden - HN1897, HN2217	Porsche 000 043 203 78
Alfa Romeo - Paraflu UP	Holden HN2043	Renault - EG Long Life Coolant D
Audi Skoda Volkswagen - G12 G13	Honda Longlife Type 2 All Season	Subaru - Super Long Life Coolant
BMW N 600 69.0	Hyundai - Ethylene Glycol Coolant	Suzuki - Ethylene Glycol Coolant
Citroen 9979.70/71/72	Jaguar - WSS-M97B44-A	Toyota - K2601G, K2601-1G
Daimler Chrysler MS-7170	Kia - Ethylene Glycol Coolant	Volvo
Daimler Chrysler MS-976	Land Rover Ethylene Glycol Coolant	VW - G12 ⁺ , G12, G11, TL-774-C

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SPECIFICATION (Medium & HD Diesel)

AFNOR NFR 15-601	Liebherr MD 1-36-130
ASTM D3306	MAN 324 SNF / 248
ASTM D4656	Mack VCS Coolant
ASTM D4985	Mercedes Benz Spec. 325.0
BS 6580	Mercedes Benz 325.5
Caterpillar ELC	Mitsubishi FUSO Genuine Diesel LL Coolant
Caterpillar 1 EO 535	Saab Scania® 6901
Cummins 3666132	SAE J 1034 and JASO M 324
DAF 742002	Toyota K2601G - 1G
DAF BTPS 606A	UD Long Life Coolant (Nissan)
DAF DCEA 615	Volvo VCS
Dennis Eagle Fleetguard	Waukesha 4-1974D
Freightliner Fleet Charge Powercool	Western Star ASTM D6210
FUSO SAE J814-C	Meets the phosphate-free requirements of European manufacturers
Hino Genuine LL Coolant	
Isuzu (GM6277M & HN2217)	
IVECO Paraflu 11	Meets the silicate-free requirements of Japanese manufacturers
IVECO GM6038M	
IVECO AC9-50	
Japanese JIS K 2234	
Jenbacher	
Kenworth ALLCool	
Komatsu KES 07.892	