



## UEC 100 coolant concentrate

Product code s8420, June 10, 2008

### Description

**UEC 100**, (Universal Engine Coolant concentrate) is a phosphate-free and amine-free, fully formulated, low silicate hybrid technology coolant engineered to meet the performance requirements of passenger cars, 4WD's and light duty diesel commercial vehicles.

This coolant provides protection to all metals found in cooling systems. It is also compatible with the non-metallic materials found in cooling systems, including rubber hoses, gaskets, silicon elastomer seals and plastics. When used at 33% to 50% by volume in softened or demineralised water, this engine coolant offers the following advantages:

- **Anti Boil, Anti Freeze, powerful protection**
- **33%, and 50% mix** - gives 3 years or 100,000 km in an automotive, 4 WD, and light duty diesel application.
- **Universal use** - meets or exceeds standard industry requirements for automotive and 4WD applications.
- **Universal Compatibility**, UEC 100 is compatible with all other engine coolants; although to get best performance it is best to flush the old coolant and replace with **UEC 100**

**UEC 100** meets or exceeds the performance requirements of the following engine coolant specifications:

ASTM D-3306 / D-4985 / D-6210 ... AS 2108.1:2004 Type A ... GM 1825M/1899M ... BSI 6580  
FORD ESE M97B44-A / M97B18-C ... JIS 2234 ... SAE J1034/J1941

### UEC 100 performance testing;

Coupon	ASTM D 1384 Glassware Corrosion		ASTM D 2570 Simulated Service	
	Test Results <sup>1</sup>	Max. Spec. <sup>1</sup>	Test Results <sup>1,2</sup>	Max. Spec. <sup>1</sup>
Copper	1.7	10	1.1	20
Solder <sup>3</sup>	4.3	30	19.3	60
Brass	0.6	10	1.6	20
Steel	0.1	10	+0.8	20
Cast Iron	+0.8	10	+1.2	20
Aluminium	+0.3	30	+2.5	60

<sup>1</sup> Weight Loss/Coupon (mg)

<sup>2</sup> Copper/brass radiator

<sup>3</sup> Regular 70/30 lead on copper/brass coupons





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ASTM Test Procedure	Test Results	Specification
D4340-89 heat Rejecting Aluminium Corrosion	<0.2 mg/cm <sup>2</sup> /week	1.0 maximum
D2809 Aluminium Water Pump Cavitation-Erosion Corrosion (rating from 1 to 10)	10	8 minimum

### UEC 100 Physical and Chemical Properties

Test	Performance	Test Method
pH (50% v/v)	7.6 - 8.5	ASTM D 1287
Reserve Alkalinity, mL 0.1N HCl	6.0 min.	ASTM D 1121
Specific Gravity (15°C)	1.125 – 1.135	ASTM D 1122
Freeze Point (50% v/v)	-37°C	ASTM D 1177
Foaming Properties - Volume (mL)	50 max.	ASTM D 1881
Foaming Properties - Break time (sec.)	5 max.	ASTM D 1881
Flash Point	116°C min.	ASTM D 92
Fire Point	120°C	
Ash Content (% w/w)	5.0 max.	ASTM D 1119
Odour	Characteristic	
Colour	OEM Green	

Shelf Life	2 years	
Total Glycol (% w/w)	94.0 min.	
Inhibitors and dye (%w/w)	5.0 max.	
Silicon (ppm)	185 max.	ICP
Chloride (ppm)	25 max.	ASTM D 3634
Total Apparent Water (%w/w)	3.5 max.	

