

EXTENDED LIFE HEAVY DUTY DIESEL ENGINE COOLANT**PHYSICAL & CHEMICAL PROPERTIES**

Test	Performance	Test Method
pH		ASTM D-1287
50%	7.6-8.2	
33%	7.9-8.4	
Reserve Alkalinity (ml)	12 Min.	ASTM D-1121
Specific Gravity 15.6C/60F	1.125-1.135	ASTM D-1122
Freeze Point (50% vol.)	-37C/-34F	ASTM D-1177
Foaming		
Foam Height (ml)	50 Max.	
Break Time (sec.)	5 Max.	
Flash Point	116C/240F	ASTM D-92
Fire Point	120C/248F	
Ash Content	5 Max.	ASTM D-1119
Odour	Characteristic	
Colour	Dow standard or Buyer spec.	
Composition (% by weight)		
Total Glycols	94.0 Max.	
Inhibitors and Dye	5.0% Min.	
Total Apparent Water	5.0 Max.	
Chloride (ppm)	25 Max	ASTM D-3634
Silicon (ppm)	174ppm Max.	ICP

PERFORMANCE TESTING

Coupon Type	Glassware Corrosion Test ¹	ASTM D-1384 Max. Spec.	Simulated Service Corrosion Test ^{1,2}	Test ^{1,2,3}	ASTM D-2570 Max. Spec.	Heat Rejecting Aluminum Test ¹	ASTM D-4340 Max. Spec.
Copper	0	10	5.6(6.3)	6.2 ⁵	20	-	-
Solder ³	24	30	17.0(51.1)	8.1 ⁵	60	-	-
Solder ⁴	+0.7	30	4.4(23.4)	3.1 ⁵	60	-	-
Brass	1	10	10.5(3.5)	10.9 ⁵	20	-	-
Steel	1	10	+0.2(+0.2)	+2.2 ⁵	20	-	-
Cast Iron	0	10	+1.8(+0.7)	5.1 ⁵	20	-	-
Aluminum	0	30	+1.9(+3.0)	+0.8 ⁵	60	<0.2	1.0

1. Wt. loss/coupon in mg.
2. Copper/brass (aluminum) radiator results
3. Regular 70/30 lead on copper/brass coupons
4. Pure 70/30 lead coupon
Shelf-life stability: 2 years from date of manufacture
Aluminum Pump Cavitation Test (ASTM D-2809) Rate: 8+ 8 min.
5. Extended simulated service test using aluminum water pump and copper/brass radiator. Test run 5313 hours. 400% past normal simulated service corrosion test run with no performance issues.

SURE-CRAFT EXTENDED LIFE Engine Coolant

Sure-Craft Extended Life Coolant is a low silicate, phosphate and amine-free, fully formulated heavy duty diesel engine coolant that **does not require an initial charge of supplemental coolant additive (SCA)** during initial fill. The product was designed for use in both automotive and heavy duty diesel applications and as such **is fully compatible heat-rejecting aluminum surfaces**. When used as a 50% coolant in softened or de-ionized water, this engine coolant offers the following advantages:

- approximately 30% less silicate than that found in GM6038M
- hardwater compatible
- longer-life, 150,000 miles or 3,000 hours prior to initial SCA requirement
- no initial charge SCA requirement
- universal use; fully meets or exceeds standard industry requirements for automotive and heavy duty diesel applications
- product is compatible with other engine coolants; although to get best performance (regarding issues such as extended-life and time between SCA addition), it is best to flush the old coolant and replace with Sure-Craft Extended Life Coolant
- product is compatible with standard SCAs

Sure-Craft Extended Life Coolant meets or exceeds the performance requirements of the following engine coolant specifications:

OEM/Agency	Specification
ASTM	D-3306/D-4340/D-4985
Cummins	Bulletin #3666132
Chrysler	MS 7170 (Europe)
Detroit Diesel	Bulletin #7SE 298
GM	1825M/1899M
John Deere	JDM HD24
MAN (MAN324)	TUC 1637/77
Mercedes-Benz (LKW)	DBL 7700
MTU	EVP 11827/MTL 5048
SAE	J1034/J1941
Saab-Scania	6901
TMC	RP 329

Sure-Craft Extended Life Coolant is manufactured using Dow Chemical Canada Ltd. Additive Package

Our oil lab offers a high tech analysis for used coolant or for your source water. Avoid coolant related problems by taking advantage of this economical service twice each year or every 1,000 hours of operation.

"No representations or warranties are made, express, implied or statutory."