



Rugged™ Universal Coolant & Antifreeze Concentrate

Rugged™ Universal Coolant & Antifreeze is a high-quality, ethylene glycol-based engine coolant recommended for a wide variety of applications. Rugged™ Universal Coolant & Antifreeze will provide maximum cooling system protection in virtually any car or truck. Rugged™ Universal Coolant & Antifreeze excels in applications that require heavy-duty, fully-formulated and low-silicate engine coolants. Rugged™ Universal Coolant & Antifreeze is a concentrate that needs to be mixed with de-ionized water.

Rugged™ Universal Coolant & Antifreeze contains a carefully balanced additive package which provides corrosion protection for aluminum, cast iron, steel, solder, copper, and brass. Rugged™ Universal Coolant & Antifreeze complies with recognized industry requirements for engine corrosion protection. Rugged™ Universal Coolant & Antifreeze is fully formulated, so it **does not require a pre-charge of Supplemental Coolant Additive (SCA)**. Rugged™ Universal Coolant & Antifreeze **contains nitrites** that are needed to protect against cavitation erosion in diesel engines equipped with wet cylinder sleeves. Please refer to the manufacturer's recommendations concerning cooling system maintenance as the coolant additive system is depleted with use and needs to be changed or replenished on a periodic basis.

Rugged™ Universal Coolant & Antifreeze, used as directed, will provide satisfactory performance in most cars, trucks, off-road equipment and stationary engines including the following:

Bluebird	Ford Motor Company (Conventional)	Komatsu
Case	Freightliner	Mack
Caterpillar (DEAC type)	GMC Truck (Conventional)	Mercedes-Benz
Chrysler	GE Locomotive	New Holland
CNH (Case/ New Holland)	Hino	Navistar International
Cummins Engine	International Truck	PACCAR
Detroit Diesel (7se298 Conventional)	Isuzu	Thermo-King
Dodge (Jeep)	John Deere	Volvo-Mack Trucks
EMD	Kenworth	Waukesha

Rugged™ Universal Coolant & Antifreeze conforms to the following industry standards:

- ASTM D-3306, ASTM D-6210, ASTM D-4985 (no SCA required)
- TMC RP-329
- U S Military CID A-A-52624-A

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TYPICAL PROPERTIES (When mixed 50/50 with deionized water)		
Test Description	Properties	ASTM Test
Freeze Point	-34°F (-37°C)	D-3321
Boiling Point	226°F (108°C)	D-1120
Nitrite	1200 ppm	D-5827
Silicate as Si	125 ppm	D-6130
Specific Gravity, 60°F	1.065	D-1122
pH	10.5	D-1287
Reserve Alkalinity (ml)	3.0 min	D-1121
Composition (% by volume)		
Total Glycols	50% nominal	E-202
Inhibitors and Dye	1.1%	
Color	Green	