

Engine Coolant Frequently Asked Questions

Some companies market a "Universal" coolant claiming that their product can be used for all vehicle applications. What is Ford's position on the use of "Universal" coolants in Ford vehicles?

- Ford does not have performance data for the multitude of engine coolants available in the aftermarket and therefore cannot recommend the use of any coolant except those approved by Ford Motor Company.
- Due to the complexity of cooling systems, no one coolant has been proven to work in all vehicles.
- "Universal" coolants generally do not contain silicates and nitrites, both of which are required for Ford vehicles equipped with Motorcraft® Premium Gold Engine Coolant. Thus, these "universal" coolants generally do not meet Ford's coolant specification WSS-M97B51-A1.
- Ford vehicles equipped with Motorcraft® Premium Engine Coolant, meeting Ford specification ESE-M97B44-A, require silicates and, in the case of diesel engines, the use of Motorcraft® Diesel Cooling System Additive, VC-8, which contains nitrites. Thus, these "universal" coolants may not be suitable for use in vehicles originally equipped with Motorcraft Premium Engine Coolant.
- Based on blind laboratory ASTM testing performed in duplicate, two leading "universal" coolants currently in the marketplace did not meet the extended D2809 requirements of Ford's Motorcraft® Premium Gold Engine Coolant specification, WSS-M97B51-A1.
- The "universal" coolants may not be compatible with Ford's recommended supplemental coolant additive, Motorcraft® Diesel Cooling System Additive, VC-8.
- Use of non-approved "universal" coolants may lead to eventual engine damage or failure. Problems caused by use of non-approved "universal" coolant may not arise immediately, but may occur over longer periods of time due to additive compatibility issues.
- Although the Ford New Vehicle Limited Warranty is not automatically voided upon the use of a non-approved coolant in Ford vehicles, if such use results in damage to the vehicle or its components, the cost of repairing the damage (and related damage) would not be covered by the Ford New Vehicle Limited Warranty.

What may be some of the consequences of using the wrong coolant?

- Reduced corrosion protection of cooling system components
- Incompatibility with engine gasket materials
- Corrosive attack of aluminum components
- Cylinder wall cavitation and engine block damage in diesel engines
- Potential water pump issues

What are the primary coolant types Ford recommends for use in its vehicles?

- Yellow-colored Motorcraft® Premium Gold Engine Coolant, meeting Ford specification WSS-M97B51-A1
- Green-colored Motorcraft® Premium Engine Coolant, meeting Ford specification ESE-M97B44-A
- Orange-colored Motorcraft® Specialty Orange Engine Coolant, meeting Ford specification WSS-M97B44-D
- Reference the Service Coolant Usage Chart for specific vehicle usage information

What are the requirements with regard to using coolant containing a taste adversant (bittering agent)?

- Currently certain states and localities require that coolant contain a taste adversant (bittering agent).
- Since additional states and localities are considering adopting the same or similar requirements, and in order to reduce complexity and confusion, Ford will soon distribute only bittered coolant in the entire U.S.

What are the advantages of "extended-life" Motorcraft® Premium Gold Engine Coolant versus a conventional coolant such as Motorcraft® Premium Engine Coolant?

- Extended drain (change-out) intervals
- No need for supplemental coolant additives required for diesel engines (except in the case of the Caterpillar 3126E engine)

What is the interchangeability of Motorcraft® Premium Engine Coolant and Motorcraft® Premium Gold Engine Coolant? Can Motorcraft® Premium Engine Coolant be used to top off a vehicle equipped with Motorcraft Premium Gold Engine Coolant? Can Motorcraft® Premium Gold Engine Coolant be used in vehicles equipped with Motorcraft® Premium Engine Coolant?

- Ford does not recommend mixing coolants. Green-colored Motorcraft® Premium Engine Coolant should not be used in vehicles except those originally equipped with it.
- However, based on the results of backward compatibility testing, certain vehicles originally equipped with Motorcraft® Premium Engine Coolant (reference the Service Coolant Usage Chart for specific vehicle usage) can be serviced using the yellow-colored Motorcraft® Premium Gold Engine Coolant as long as the following conditions are met:
 - (1) If the green-colored engine coolant is thoroughly flushed out of the cooling system and then the system is filled with yellow-colored engine coolant, the service maintenance (change-out) intervals of the yellow-colored engine coolant can be followed.
 - (2) If the green-colored engine coolant is not completely flushed out of the cooling system (e.g., yellow-colored engine coolant is used to top off the system), then the service maintenance (change-out) intervals of the green-colored engine coolant must be followed.
 - (3) All pre-1999 vehicles, as well as all model years of Mercury Villager, must be serviced with the green-colored engine coolant.