



Ford Motor Company Position Statement on Universal Antifreeze/Coolants

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 coolants except those approved by Ford Motor Company.
- Due to the complexity and technology advances in cooling systems, no one coolant has been proven to work in all vehicles.
- Ford does not recommend mixing coolants. Mixing of engine coolants may harm your engine's cooling system.
- "Universal" coolants generally do not contain silicates and nitrites, both of which are required for Ford vehicles equipped with Motorcraft® Gold Antifreeze/Coolant. Thus, these "universal" coolants generally do not meet and are not approved to Ford's coolant specification WSS-M97B51-A1.
- Ford vehicles equipped with Motorcraft® Premium Antifreeze/Coolant, approved to 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 Antifreeze/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® Gold Antifreeze/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, specified for use in diesel engine-equipped vehicles factory-filled with either Motorcraft® Premium Antifreeze/Coolant (ESE-M97B44-A) or Motorcraft® Gold Antifreeze/Coolant (WSS-M97B51-A1).
- The "universal" coolants may not be compatible with Ford's recommended corrosion inhibitor booster, Motorcraft® Specialty Orange Engine Coolant Revitalizer, VC-12, recommended for use in the following diesel engine-equipped vehicles factory-filled with Motorcraft® Orange Antifreeze/Coolant (WSS-M97B44-D and WSS-M97B44-D2): 2011 and forward F-Series Super Duty and 2016 and forward F-650 and F-750.
- 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 and o-rings
- Corrosive attack of aluminum components
- Cylinder wall cavitation and engine block damage
- Potential water pump issues
- Plugging of small coolant passageways

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

- Orange-colored Motorcraft® Orange Prediluted Antifreeze/Coolant, approved to Ford specification WSS-M97B44-D2 / Motorcraft® Orange Concentrated Antifreeze/Coolant, approved to Ford specification WSS-M97B44-D.
- Dark green-colored Motorcraft® Specialty Green Engine Coolant, approved to Ford specification WSS-M97B55-A
- Yellow-colored Motorcraft® Gold Antifreeze/Coolant, approved to Ford specification WSS-M97B51-A1

- Fluorescent green-colored Motorcraft® Premium Antifreeze/Coolant, approved to Ford specification ESE-M97B44-A
- For specific vehicle usage and other related information, reference the Motorcraft® Engine Antifreeze/Coolants and Motorcraft® Engine Cooling System Products usage charts available via <https://www.fcsdchemicalsandlubricants.com/main/quickref/coolantsEN.pdf>

Based on the information Ford engineering has on other manufacturers' (competitors') vehicles' engines, our position is repair facilities should use in these vehicles the actual antifreeze/coolant specified by the vehicle manufacturer.