

# Coolant Types and Degradation



There are many different chemistries and colors of coolant on the market today and it can be quite confusing. Always refer to your vehicle manufacturer's recommendations when choosing replacement coolant.

## STANDARD GREEN

A standard inorganic acid technology formula coolant used primarily for vehicles pre-1996. Contains phosphate and silicates and is green in color. Corrosion fighting chemicals wear out after 36,000 of average use, so the coolant must be changed periodically to minimize risk of corrosion damage.

## EXTENDED LIFE (OAT)

An extended life coolant containing organic acid technology (OAT) that is typically orange in color. Corrosion inhibitors include sebacate, 2-ethylhexanic acid (2-EHA) and other organic acids, but no silicates or phosphates. OAT coolants are slower acting than the standard green formula, but last longer - approximately 150,000 miles.

## EXTENDED LIFE HYBRID (HOAT)

An extended life coolant utilizing silicated hybrid organic acid technology (HOAT) and containing organic acids and inorganic inhibitors. Sometimes referred to as G-05 formula coolant, the most common inhibitor used is silicate. The combination increases corrosion protection for aluminum engines and cooling system components. Service life is 150,000 miles.

## UNIVERSAL

Marketed for all passenger cars and trucks, universal coolants use OAT-based corrosion inhibitors with proprietary organic acids. Color is typically yellow or yellow-orange. Service life is 150,000 miles. When used to top off a vehicle that contains standard green coolant, service life reduces to 30,000 miles.

Over time, coolant contained within the cooling system collects sediment, rust particles and debris from the gradual breakdown of internal components. It is important that the cooling system be flushed and filled with new coolant based upon the vehicle manufacturer's recommendation to maintain optimum system performance and avoid contamination issues.

New, Clean Coolant

Old Coolant Containing  
Rust and Sediment



*\*The color of clean coolant will vary by type and manufacturer.*