# Prestone EV



# **Prestone® EV™ RTU Thermal Management Fluid** Prestone EV-LC POAT Electric Vehicle Specific Fluid

## Description

Prestone low conductivity (LC) EV Thermal Management Fluids are formulated to meet the specific demands of battery electric and hybrid vehicles. Based in ethylene glycol, the inhibitor package is designed to protect the metallurgy makeup of the EV thermal system. With <100  $\mu$ S/ cm electrical conductivity, Prestone EV fluids are designed for compatibility with electric vehicles and optimize the temperature of the battery, motor, and power electronics to maximize system health, performance, and safety.

#### Use

Prestone EV-LC POAT is a pre-diluted, electric vehicle specific, thermal management fluid designed for use in indirect thermal management systems. Prestone EV-LC POAT is based on organic phosphate inhibitor technology formulated specifically for electric vehicles that provides superior corrosion protection. Developed to meet industry specifications including the EV coolant specific GB29743.2, this fluid has an electrical conductivity below 100  $\mu$ S/cm making it safe, and compatible with electric vehicles. The fluid is free of silicate, borate, nitrite, and amine, making it an excellent candidate for applications that require POAT-based, amine free formulations.

### Storage and Handling

Store Prestone EV-LC POAT in poly-lined or HDPE containers, at a maximum temperature of 30°C. Minimize exposure to direct sunlight. Disposal should be done in accordance with local laws and regulations.

# **Physical Properties**

Prestone EV-LC POAT is offered as a ready-to-use 50% solution with optimal freeze/boil protection and low electrical conductivity of 77 ( $\mu$ S/cm).

Prestone EV-LC POAT	Result	Method
Appearance	Clear/Red	Visual
Electrical Conductivity @ 25 C (µS/cm)	77	ASTM D1125
рН	7.3	ASTM D5464
Reserve Alkalinity (4.5 endpoint)	0.35	ASTM D1121
Freeze point (°C)	-49.5	ASTM D1177
Boil point (°C)	111	ASTM D1121
Reserve Alkalinity (4.5 endpoint)	0.35	ASTM D1121
Chloride (ppm)	2 Max	ASTM D5827
Boron (ppm)	2 Max	ASTM D6130





# **Corrosion Protection**

Prestone EV-LC POAT is specifically formulated to protect metals specific to electric vehicles systems including multiple grades of aluminum, steel, copper, and brass. Using a proprietary POAT inhibitor package developed specifically for EVs, Prestone EV-LC POAT passes the GB29743.2 electric vehicle specification glassware corrosion test without the use of silicate or amine.

Metal	Prestone EV-LC POAT loss/gain	GB29743.2 Limit
Copper	-0.1	10 max
Brass	0.5	10 max
Steel	1.2	10 max
Cast Al	-0.4	10 max
AI 3003	3.8	10 max
AI 4043	3.3	10 max
AI 6063	-0.2	10 max

