Prestone ALL MAKES AL

100% OF THE COOLANT MARKET COVERED IN 1 OE FORMULA

- **ALL MAKES ALL MODELS** guaranteed to be suitable for all cars and light duty vehicles.
- **Compatible and mixes with ANY colour of coolant/antifreeze already in system**. Suitable for use with: the VAG G12, G12+, G12++ and G13 standards.
- **Guaranteed corrosion protection for 150,000 miles or up to 10 years**, Prestone's patented formula prevents corrosion inside the cooling system protecting each metal and non-metal part.
- **OE approved as first fill for leading manufacturers**: Ford, General Motors and Toyota. Prestone Coolant meets or exceeds the performance requirements of all car manufacturers worldwide.
- **Prestone's OAT (Organic Acid (Additive) Technology)** has completed over 18 million miles in testing and many more millions of miles on the road.



L MODELS GUARANTEED

CORROSION PROTECTION PERFORMANCE





Prestone Excels in extremes



THE NUMBER 1 COOLANT IN THE U.S. TESTED TO EXCEL IN EXTREMES

- Reduce inventory costs mixes with any colour of coolant. Rigorous testing ensures no gelling or damaging effects
- Guaranteed corrosion protection for 150,000 miles or up to 10 years
- Officially approved as first fill for Ford, General Motors and Toyota



SUITABLE FOR ALL MAKES AND MODELS MIXES WITH ANY COOLANTIANTIFREEZE ALREADY IN THE SYSTEM

Tested in the lab - when mixed with various colours of coolant, **Prestone Coolant** did not change the colour or effectiveness of the coolant already in use. Suitable for use with the VAG G12, G12+, G12++ and G13 standards.



Available in 1L, 4L, 2OL and 205L in concentrate and ready to use formulations





PRESTONE IS THE OFFICIAL COOLANT AND SCREEN WASH SUPPLIER FOR THE MSA BRITISH RALLY CHAMPIONSHIP

For more information please contact our dedicated sales team: **Tel**: 0161 866 4800 **Email**: sales@holtsauto.com



COMPATIBILITY GUARANTEE COOLANT / ANTIFREEZE

Guaranteed for ALL cars and light duty vehicles Mixes with ANY colour of coolant already in the system

Please be advised that our: Patented Coolant / Antifreeze

- Provides extended life of up to 150,000 miles or up to 10 years corrosion protection¹
- Is FREE from Silicates, Phosphates, Borates, Nitrates and Amines
- Meets or exceeds the performance requirements of ALL car manufacturers worldwide²
- Supports the international aftermarket performance requirements of: ASTM D3306, D4985
 SAE J1034

BS 6580: 2010

• Is compatible and can be mixed with ANY colour of coolant/antifreeze². Suitable for use with the VAG G12, G12+, G12++ and G13 standards

Conditions of Guarantee:

- When used according to Prestone usage instructions
- Vehicle should be serviced according to car manufacturer's recommended service intervals
- 1. When cooling system is flushed and filled with Prestone coolant/antifreeze
- 2. Compatible with all types/colours of coolant/antifreeze on the market today when testing according to ASTM test methords

Officially approved as first fill for leading manufacturers; Ford, General Motors and Toyota

www.holtsauto.com/Prestone









GUARANTEED ALL MAKES ALL MODELS ADD TO ANY COOLANT/ANTIFREEZE





restrue

HYBRID

Prestone

Guaranteed for use in ANY heavy duty engine, in ANY industry:

- Road Transport
- Construction & Mining
- Marine
- Oil & Gas
- Agricultural Applications
- Extended Service Life Technology
 - 600,000 miles (1,000,000km) on the road
 - 12,000 hours off road/plant
- Protects from -37°C to +129°C
- ٠ No supplemental coolant additive required*

*Add to any O.A.T extended life coolant/antifreeze. Flush and fill for full extended service life protection

restone

Unlike inferior coolants, Prestone prevents wet liner pitting and protects all other cooling system components, such as premature water pump failure, scale formation and silicate gel deposits, which can destroy engines.



HELPS REDUCE COOLING SYSTEM MAINTENANCE WHICH ACCOUNTS FOR UP TO 40% OF ALL HD ENGINE DOWNTIME

For more information please contact our dedicated sales team Tel: 0161 866 4800 Email: sales@holtsauto.com www.holtsauto.com



The OE Multi- Universal Coolant/ Antifreeze For Motorcycles, Cars and Caravans until 3.5 tons



Coolant Explained

- Motorcycle, Car, Caravan until 3.5 tons
 - The changing coolant market
 - Engine Technology
 - Cooling System Basics
 - Challenges selling coolant for modern cars in the Aftermarket
 - Prestone

Engine Fluid Technology

- Modern engine oils have changed the specification is now dictated by the OEMs.
- A shift in the OEM requirement for oil performance has led to a vast number of different oils.
- This shift is driven largely by increasing legislative pressure to reduce the impact of vehicles on the environment.

The coolant situation is no different!

What has changed?

Todays Coolant Market

Blue/Red Antifreeze (no longer suitable)

Manufacturer Specific HOAT/OAT/Si-OAT (5 years)

Commodity



Vehicle Specific



The Cooling System



Cooling System Materials

- Cast Iron/Aluminum cylinder blocks, cylinder heads, intake manifolds, coolant pumps and outlets.
- Steel core plugs, coolant pump housing and impellers.
- Aluminum alloys in radiators and heater cores.
- Solder to join the components in brass radiators and heater cores.
- Water cooled components- Turbochargers, Alternators EGR valves and coolers.



What do coolants do?

- Provide efficient heat transfer from the engine to control critical metal temperatures and maintain optimum performance.
- Maintaining optimum engine temperature is critical for lubrication, fuel economy and exhaust emissions.
- Provides freeze protection to the lowest temperature likely to be encountered.
- Provides boil over protection even in the highest temperatures.
- Inhibit corrosion of all cooling system metals and does not degrade nonmetals.

60% OF ALL ENGINE FAILURES ARE ATTRIBUTED TO THE COOLING SYSTEM!

The Optimum Temperature

• Engine Temperatures Too Cold

- High hydrocarbon emissions.
- Poor fuel consumption.
- Poor lubrication & excessive engine wear.
- Freezing of coolant.
- Loss of coolant = cooling system failure.



Engine Temperatures Too Hot

- Fuel pre-ignition / knock / noise, engine damage.
- Oil viscosity low and degrading, engine wear
- NO_x emissions increase.
- Build-up of pressure in coolant system and leakage.
- Boil over and loss of coolant = cooling system failure.

Without coolant a 90Kg engine block can melt in 20 minutes!

What can go wrong?

Poor Coolant quality can lead to:



Corrosion

• Erosion and cavitation





Silicate dropout

Silicates or phosphates 'fall out' of solution. Silicate gels can be deposited in the cooling system

Ethylene Glycol



- Concentrated coolant should contain 95% Ethylene Glycol (EG).
- Pre-blended coolant is typically a 50:50 mix of EG and water.
- The corrosion inhibitor package only makes up around 4% of the coolant.
- The balance is a mixture of water, dye, bittering agent & antifoam. Prestone offers just this.

Like engine oil..... Its all about the Additive Package!!

Coolants Basics

•Ethylene Glycol (EG), is by far the most common glycol used in coolant / antifreeze. A 50:50 mixture provides:

- Freeze Protection to -37°C
- Boil Over Protection to +129°C



Evolution of Coolant Additives

- Engine technology has developed as a consequence of regulatory pressures to reduce vehicle's impact on the environment:
 - Fuel economy,
 - Exhaust emissions
 - Carbon footprint
- Engines have become lighter, vehicles are more fuel efficient and harmful chemicals are restricted for use (amines, nitrates, phosphates, borates, etc.)

Pre-1990s	From 2000	TODAY
I.A.T INORGANIC ADDITIVE TECHNOLOGY Silicate, Borate, Etc.	H.O.A.T HYBRID ORGANIC ACID TECHNOLOGY Phosphate Free	O.A.T ORGANIC ACID TECHNOLOGY
60,000 MILES (2 YEARS)	100,000 MILES (5 YEARS)	150,000 MILES (5 YEARS)

It is Composition not Colour that's Important.....



Mercedes C250: 200000km/10 years Coolant service life

BMW 120i Petrol 150000km/10 year Coolant service interval



Getting it right

- Identifying the Vehicle
- Identifying the correct coolant specification
- Offering advice, such as coolant change intervals, capacities etc.
- Selling the right product or size for the customers needs.

So According to Other Coolant Manufacturers.....

• Coolant/Antifreeze is vehicle specific.

Even though the recommended coolant might not have the technology to last the service interval .

Coolants Cannot be mixed

If the recommended coolant is different than current coolant, system must be flushed and filled, leaving YOU unable to sell a top-up

• If in doubt, the coolant must be flushed and filled.

This is true if the coolant manufacturer is still using silicates or phosphates in their products.

Prestone Is Different

Today's Coolant Market

Blue/Red Antifreeze (no longer suitable) Manufacturer Specific HOAT/OAT/Si-OAT (5 years)



Commodity



Vehicle Specific

All Makes, All Models

Prestone

(10 Years)

Prestone has accumulated over 20 million miles in fleet testing of its organic acid technology coolants!

What is Prestone?

- Prestone is the Number 1 Coolant/Antifreeze brand in North America.
- Prestone was the first manufacturer to use ethylene glycol in coolants in 1927.
- It is an O.E. product. Fitted at factories globally as first fill by leading manufacturers Ford, GM and Toyota.
- Suitable for all Makes and Models, it will mix safely with any coolant already in the system.
- Meets and exceeds every national, international and manufacturer specification.
- Guaranteed protection for 10 years. The best guarantee offered by any coolant manufacturer globally.

Original Equipment Manufacturer



Prestone Compatibility

- Other coolant manufacturers would have you believe that coolants cannot be mixed.
- This may be true of other coolants using a range of additive packages.
- Due to Prestone's unique, patented additive package it can be mixed with <u>ANY</u> colour of coolant without causing damage.
- Prestone Coolant does not change the colour or effectiveness of the coolant already in use.

Coolants Before Adding Prestone



Coolants After Adding Prestone



Not all OAT coolants are compatible



Patent 8,696,927 Patent 8,617,416 Patent 8,617,415 Patent 7,744,775



Prestone Compatibility Guarantee

- Provides extended life of up to 150,000 miles or up to 10 years corrosion protection.
- FREE from Silicates, Phosphates, Borates, Nitrates and Amines.
- Meets or exceeds ALL OEM specs.
- Meets or exceeds: ASTM D3306, D4985, SAE J1034, BS6580: 2010
- Compatible with ALL coolant/antifreeze including:
 - Suitable for use with the VAG G12, G12+, G12++ and G13 standards
- Prestone has been independently tested by DEKRA.



Research and Development

- Prestone's Technical Centre is based in Connecticut, USA.
- State-of-the-art laboratories and world class corrosion inhibitor expertise.
- Renowned Research fellows are on the ASTM D15 committee that develops international coolant specifications.
- In-house fleet vehicle development, testing & maintenance.
- Extensive OEM collaboration means Prestone stays at the cutting edge of cooling system component development.
- UK based customer technical support.



Exceeding All Standards

- Prestone meets or exceeds the requirements of EVERY OEM specification.
- Prestone meets or exceeds the requirements of EVERY recognised national and international coolant standard in the world:
 - ASTM D-3306
 - ASTM D-4985
 - BS6580 : 2010
 - AFNOR NFR 15-601*
 - SAE J 1034

American Society for Testing and Materials American Society for Testing and Materials British Standards Institute Association Francaise de Normalisation Society of Automotive Engineers



Prestone Benefits

Customer satisfaction

- Fewer SKUs, lower stock levels, simpler stock management.
- Simpler delivery preparation.
- Lower warehousing & logistics costs.
- Greater return on capital employed.
- Increased cash margin.
- Improvement in cash flow.

Prestone Product

- Peace of mind, no chance of making a mistake.
- Convenience, less time needed to find a vehicle specific coolant.
- Replaces all other coolants.

Prestone Team

- Dedicated customer services.
- Aftersales support & training.
- Dedicated technical support throughout the value chain.

Prestone FAQs

- OEMs and coolant manufacturers say that coolants cannot be mixed?
 - Prestone is unique, patented and tested to ensure compatibility with all coolants and meets or exceeds all OEM specifications.
- Prestone is not listed in our electronic catalogue system?
 - No application look-up is required, Prestone is suitable for all makes and all models, guaranteed.
- What happens if a customer has a problem?
 - The dedicated Prestone aftersales and technical teams are ready to support you and your customers.
- What if the vehicle is still under warranty will the use of Prestone invalidate the warranty?
 - No, Prestone meets or exceeds the OEM specifications and is covered in accordance with supplementary guidelines 2010/C 138/05, paragraph (20), which accompany EU Commission Block Exemption Regulation No 461/2010

Coolant Range



Available in ready to use 1L/4L Available in Conc 1L/4L/20L/60L/205L

Corporate Responsibility

- Ethylene Glycol (EG) is harmful if ingested. Prestone's policy is to:
- Package all coolants with a Child Resistant Closure (CRC).
- Use a bitter agent to prevent accidental ingestion by children and pets.
- Prestone will NOT use chemicals listed in the REACH regulations as Substances of Very High Concern" (SVHC).
- Borax, commonly used in blue and red coolants is classed as an SVHC in Europe. It is still used by some of the world's biggest coolant manufacturers.



EXCELS IN EXTREMES

