

# Lucas



## ALL YOU NEED TO KNOW ABOUT RADIATOR ADDITIVES

Made in the USA



[lucasautomotive.com](http://lucasautomotive.com)

OUR RANGE GOES FURTHER

## ABOUT LUCAS

Lucas was founded in Birmingham, England in 1845 and is the oldest continuously trading automotive brand in the world.

It is a brand with a thousand stories to tell. For generations the Lucas name has been relied on all over the world, in every country, in any environment. Whatever be the challenge, there's an answer in a famous Lucas green box or product.

Lucas offers the range, coverage and quality that can take you anywhere, safely and reliably.

Lucas products arise out of technical excellence and a spirit of innovation that has guaranteed ongoing international success. Our reputation is based on a wide product range, with exceptional durability and resistance.

D1120, D1287, D95, D1384, D6211, D3303, D4985, D3306, RMC RP 329



Products manufactured to replace the use of water in the cooling system.



The bottles have a security seal foil to prevent reproductions, counterfeit falsification and / or alterations in the products.



Our radiator additives protect all metals and the latest aluminum, copper and magnesium alloys.



Compatible with the automotive manufacturer's regulations in the European, Japanese, Korean, Asian, Brazilian and American countries.



Products manufactured to replace the use of water in the cooling system.



Child Resistant Cap (CRC) Prevents opening of containers by children.



*(Gallon size/presentation only).*

## 1 WHY NOT USE WATER?

Water is harmful to engines and machinery because it contains minerals and impurities. In machinery and mechanical elements, these form deposits and on contact with ferrous materials, rust occurs which causes rust and corrosion. This is why, the water we use is treated and filtered, which ensures the optimal function and application of all of our products.



## 2 THE ROLE OF ADDITIVES

Additives are responsible for forming a protective layer on the metals, plastics, hoses and other elements that are part of the cooling system. In the absence of the additives, the use of completely pure glycol or water will cause damage to the cooling system.

As you would expect, the additives used by Lucas are specifically chosen to provide enhanced protection and ultimate performance under any conditions, no matter how harsh.



Made in the USA



## 3 WHEN DO I NEED TO CHANGE THE COOLANT?

For best results and performance, we recommend replacement every 15,000 miles (25,000 kilometres) or once a year.

In the case of high mileage vehicles such as taxis or those that have severe use, the fluid should be replaced every 6 months and in industrial equipment, every 5,000 hours.



## 4 COLOR DIFFERENTIATION

The colors used to identify coolants have been selected to allow rapid detection in case of leakage but do not really affect the performance of the product. They are only dyes.

Lucas RED 50/50 Long Life Antifreeze / Coolant and Lucas Green 50/50 Long Life Antifreeze / Coolant. Protects freezing up to  $-34^{\circ}\text{F}$  ( $-37^{\circ}\text{C}$ ) and boilovers to  $270^{\circ}\text{F}$  ( $132^{\circ}\text{C}$ )\*. With Ethylene Glycol based formula and the newest OAT Generation additives to protect from rust, corrosion and electrolysis. Meets or exceeds ASTM D3306, ASTM D4985, ASTM D6210, TMC RP 329.

Meets or exceeds all of the following manufacturers' specifications: Case, Caterpillar, Cummins, Detroit Diesel / MTU, GM, Freightliner, Hino, International, Isuzu, John Deere, Mitsubishi, Nissan, Toyota, Volvo and Mack PACCAR. Formulated with ethylene glycol based and the newest OAT generation additives and SCA's to protect from rust, corrosion and electrolysis.

Safe to use with DexCool®



## 5 WHAT IS GLYCOL?



*Glycol is hazardous to our environment. Dispose of carefully.*

Glycol is a chemical compound liquid that is odorless and colorless, which at room temperature has a thick oily consistency. This oily consistency should not be confused for being a lubricant. Glycol's only function is to prevent water from freezing and increase its boiling point. It is used to formulate antifreeze and de-icing solutions, in applications such as cars, airplanes and boats. A lot of the glycol based products have neurotoxic effects that can have an effect on the cardio-circulatory, respiratory and gastrointestinal systems and can cause damage to the liver, kidneys and pancreas. In addition to this, they are very harmful to the environment. In climates of countries like Central, South America, Caribbean, Middle East, Asia and Africa minimum temperatures do not allow water to freeze. In the meantime, modern automotive engines do not allow the temperatures to rise to a boiling point and the increase in boiling point is unnecessary. NOTE: One gallon of ethylene glycol can contaminate 10,000 gal. of water. Glycol based antifreeze should be treated as a hazardous waste.

## ANTIFREEZE/COOLANT FORMULAS

50/50 - 33% - 20% - XXTREME Heavy Duty – WATERLESS

- Five (5) different concentrations: 50/50, 33%, 20%, Waterless and XXtreme
- Meets or exceeds ASTM D3306, ASTM D4985, ASTM D6210, TMC RP 329, VW G11, G12, G12+ and G13.
- Meets or exceeds all of the following manufacturers' specifications: Case, Caterpillar, Cummins, Detroit Diesel / MTU, GM, Freightliner, Hino, International, Isuzu, John Deere, Mitsubishi, Nissan, Toyota, Volvo and Mack PACCAR. Formulated with ethylene glycol and the newest OAT generation additives and SCA's to protect from rust, corrosion and electrolysis
- Safe to use with DexCool®
- Premixed- Ready to use - do not add water.

Made in the USA



## 6 DIESEL / GASOLINE DIFFERENCES

The requirements for each type of engine are different, so the additives that they contain vary in the same way.

In the case of the diesel additive, we have an additional additive formulation with SCA (Supplementary Coolant Additive) that is specific to meet the requirements of diesel engines



## 7 ELECTROLYSIS

Electrolysis is the result of electricity flowing through your cooling system and causing an electrochemical charge across the metals. This results in rapid corrosion and severe damage to the components in your cooling system including discoloration, pitting, flaking, and pinholes. Allowing the current to flow through the system causes deterioration and damage to the aluminum radiator blades, pipes, water passages in the head and sleeves.



## IMPORTANT INFORMATION

**The thermostat** is a valve in charge of allowing or restricting the passage of the additive/coolant between the engine and the radiator, by means of its opening or closing. The thermostat controls the temperature of the refrigerant contained in the engine based on the manufacturer's requirements, the vehicles normally operate at a temperature of 195 ° F / 90.5 ° C. If the valve is locked, the engine will operate cold or overheat, depending on the position in which it is left. In view of this, the refrigerant could reach boiling point causing problems. **NOTE:** Never allow a mechanic to remove the thermostat from the vehicle cooling system. The thermostat should be replaced as recommended by the manufacturer or in the event of a failure



**The Waterpump** is one of the main mechanical elements of the car. This part is responsible for continuously pumping the coolant/antifreeze to the engine for thermal control. Damage to the bearings or leakage could be catastrophic to the engine, so it is necessary to protect and replace it in a timely manner



**The hoses** are part of the cooling system with the function of communicating the radiator and the motor for heat exchange, for that reason it is necessary to avoid their hardening by means of a suitable additive package. The hoses should be replaced as recommended by the manufacturer or in the event of a failure.



**The radiator cap** is a piece that isolates the radiator from foreign elements and regulates the pressure and the movement of the coolant as additive/coolant pressure changes. In case of failure symptoms are similar to those of thermostat failure, without pressure in the system can also create bubbles or foam and the fluid reaches boiling point at a much lower temperature.



Lucas Fluids, A/C Gas and Emergency Lighting

PO Box No. 342001 | IFZA Business Park, DDP, United Arab Emirates.

Mob.: +00971 54 784 5815 (UAE)

Email: rag@ampcodubai.com

Made in the USA

