



PRODUCT INFORMATION SHEET

WYNN'S HEAVY DUTY UNIVERSAL COOLING SYSTEM FLUSH

Product Number: A4701 24 x 354 ml

WYNN'S HEAVY DUTY UNIVERSAL COOLING SYSTEM FLUSH is a radiator cleaner, formulated to take maximum advantage of the best features of the cooling system, and is both easy and safe to use by persons not having special skills or training. When used as directed, it will promote cooling system efficiency and better engine performance.

Introduction

The Problem

Automobile manufacturers require scheduled engine antifreeze/coolant changes in order to maintain warranty coverage. Following the warranty period, engine antifreeze/coolant changes are still recommended at specified intervals to maintain optimum operating performance of the cooling system.

Just like other automotive fluids, antifreeze/coolant deteriorates over time and can form damaging rust and scale deposits and acidic by-products. Deposits can cause restricted flow and poor heat transfer and contribute to engine overheating. In fact, cooling system failure is the leading cause of mechanical breakdown on the highway, according to the U.S. Department of Transportation. If the cooling system fails, the engine and transmission could suffer severe damage as well.

In many cases, traditional radiator flush products are relatively mild and do not effectively remove the rust and scale deposits to restore proper antifreeze/coolant flow and heat transfer efficiency. Relying on a radiator flush product that is too mild to do the job may result in a false sense of security following the service, as flow restrictions and inefficient heat transfer may still exist.

When looking at the various formulations (conventional, organic acid and hybrid) and colours (green, yellow, orange, red, blue, pink, etc.) of antifreeze/coolants on the market, it is obvious that a confusing array exists. It is also obvious that there is confusion in the marketplace in general over which type of radiator flush and which type of radiator treatment is appropriate based on the type of antifreeze/coolant used. In addition, shops face an inventory nightmare if they try to stock flush and treatments specific to each type of antifreeze/coolant. A single choice in radiator flush and radiator treatment products to eliminate the guesswork would be a definite plus for the professional service provider. Wynn's Heavy Duty Universal Cooling System Flush is designed to be compatible with most of the formulations in the current market.

Advantages

- REMOVES RUST, GREASE, SLUDGE AND SCALE

While the damaging effects of rust in cooling systems is generally recognised, the harmful effects of grease and sludge are often overlooked. Sludge-forming oil enters the cooling system through leaky head gaskets and the use of inferior quality soluble oil type corrosion inhibitors which rapidly break apart. This type of cooling system contamination results in sludge accumulation in the radiator and reduced coolant flow unless removed by regular flushing.

Water contains dissolved inorganic matter which is present in the composition of soil and rock materials, which the water comes into contact with.

Because of its origin, water contains different amounts and types of scale forming solids, such as calcium, magnesium and silica.

Scale acts as an insulator and reduces the amount of heat that has to be transferred away into the cooling system.

For example, 0.75mm of scale has the same insulating properties of 5cm of steel.

Scale formation is of particular concern in large cooling systems where scale build-up traps heat and eventually causes engine problems.

- NO NEUTRALISER NEEDED

Strong acid or strong alkali type radiator cleaners not only clean "too clean" to the extent of re-opening small holes that have been sealed over by rust and/or scale, but also continue to attack cooling system components until stopped by a neutralising agent despite thorough flushing of the system with water. Wynn's Heavy Duty Universal Cooling System Flush contains no harsh acid or alkali compounds and can be used safely by motorists without any neutralising steps being required.

- HARMLESS TO ALUMINIUM

Wynn's Heavy Duty Universal Cooling System Flush is not only safe for the usual cast iron engine blocks and component parts but also for aluminium engine blocks. It has been particularly inhibited to make it harmless to aluminium alloys and other special alloys employed in cooling systems.

- HARMLESS TO RADIATOR HOSES OR GASKETS

Because it is a specifically formulated radiator cleaner, Wynn's Heavy Duty Universal Cooling System Flush will remove rust, scale, sludge, grease and other foreign materials from automotive cooling systems without damage to hoses, gaskets, metals or other cooling system components.

Benefits

Wynn's Heavy Duty Universal Cooling System Flush has been formulated to provide the following benefits:-

- Cleans radiators quickly and safely.
- Removes rust, sludge and scale deposits.
- Restores coolant flow and heat transfer efficiency.
- Safe with aluminium and other metal components.
- Compatible with cooling system components, hoses and gaskets.
- Compatible with the latest coolant formulations.

Applications

Wynn's Heavy Duty Universal Cooling System Flush safely removes rust, grease and sludge from the entire cooling system without damage to any part.

Use Wynn's Power Flush machine or follow vehicle manufacturer's recommended flushing procedures. Drain radiator and re-fill with fresh water. Add entire contents of bottle of Wynn's Heavy Duty Universal Cooling System Flush to radiator (not the expansion tank) and replace radiator cap. With heater on, run engine for 10 minutes. Stop engine and open cooling system drain. Start engine. With engine idling, flush radiator until water runs clear. Stop engine.

For vehicles without a radiator cap, add one bottle of Wynn's Radiator Flush to the upper radiator hose.

Close drain and re-fill with the recommended Wynn's coolant. Idle engine until operating temperature is reached. Inspect for leaks. To prevent and stop cooling system leaks, use Wynn's Premium Radiator Stop-Leak (#68607) or Wynn's Professional Radiator Sealant (#19201). Follow air-bleeding procedures as per manufacturer's instructions. When engine cools, re-check the coolant level.

Typical Characteristics

Appearance	Clear Thin Liquid
Colour (Visual)	Yellow
Flash Point (°C)	None
Boiling Point (°C)	100
pH (Concentrate)	8.5 (ASTM D 1287)
pH (3% vol in Distilled Water)	8.3 (ASTM D 1287)
Density @ 15°C	1.050 (ASTM D 4052)
Foam Break (seconds)	3 (3% vol in Distilled Water)