



**TECHNICAL BULLETIN**  
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## ***MYTHS AND LEGENDS 5***

### ***ANTIFREEZE IS CORROSIVE***

There have been many instances of customers calling the Technical Hotline concerned that anti-freeze is corrosive and will damage their engines.

This is simply NOT the case.

A mix of pure ethylene glycol and water on it's own is corrosive.

However, anti-freeze products are designed to prevent corrosion.

Blended with the ethylene glycol (or propylene glycol) is a combination of corrosion inhibitors that are designed to protect the engine components from corrosion. A fully formulated anti-freeze - such as Penrite Premium Anti-Freeze Anti-Boil and Pro Anti-Freeze Anti-Boil – is not corrosive as long as it used at the required treat rate, generally 33% to 50% in good quality water. Under dosing a radiator system can lead to corrosion as the inhibitor levels are too low. Over dosing a system can lead to corrosion or system blockages as the conventional inhibitors deposit within the engine's cooling system.

However, under-dosing and over-dosing can also occur with water based products with exactly the same results as if it were an antifreeze-antiboil.

So – when used correctly – a fully formulated anti freeze anti boil product is no more corrosive than using a water based system.