

## Antifreeze

Antifreeze, as the name suggests, is used to prevent an engine's coolant from freezing, however it has other properties that we all need to be aware of.

Antifreeze raises the boiling temperature of the coolant and high concentrations of antifreeze will also reduce the primary function of the engine coolant; absorbing heat from an engine's components and transporting it out of the engine.

Generally, antifreeze consists almost entirely of ethylene glycol, which when used in excessive amounts, can also promote corrosion in the components and water galleries of the engine's cooling system. Ethylene glycol also has a tracking property which can cause leak problems with hose connections, gaskets and welsh plugs on rebuilt engines.

As a caution you should also be aware that ethylene glycol is a toxic substance which if ingested can be lethal and must be disposed of in an authorized manner.

When adding antifreeze to a cooling system, a key point to consider is what is the coldest temperature that the vehicle is going to be exposed to when parked overnight or when in operation? Based on this information how much antifreeze is actually required for the protection of the engine?

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