



SERVICE PRODUCTS. PRODUCT HIGHLIGHTS.

BMW/MINI Antifreeze/Coolant.

82 14 2 209 769, BMW, 1 L/33.8 fl oz 82 14 1 467 704, BMW, 1 US gal/3.785L 82 14 0 031 133, MINI, 1 US gal/3.785L

Product Description

The BMW/MINI Antifreeze/Coolant is premium radiator protection containing silicate with hybrid technology. Inorganic and organic inhibitors are responsible for corrosion prevention in the radiator system. By use of additives and inhibitors, BMW/MINI Antifreeze/Coolant is able to provide long-term protection quickly and comprehensively to all materials in the entire cooling circuit, and if applied correctly, provide extensive protection against damage such as overheating and corrosion and against frost in winter. The product is blue/green in colour.

On average approx. 150 litres cooling fluid per minute are pumped through a car's cooling circuit and very much more in the case of commercial vehicles. In the process the mixture of water and radiator protection comes into contact with up to 100 different materials.

Application

- BMW/MINI Antifreeze/Coolant is a concentrate and must be diluted before use in the radiator system.
- Dilute with water (50:50) before pouring into the engine cooling system.
- In general, "normal" tap water can be used.

Information

Please observe the following when handling radiator protection:

- Always change the entire cooling fluid.
- Ideally, rinse the cooling system with water before filling with new radiator antifreeze.
- Do not dispose of cooling fluids with wastewater.



It is necessary to change the radiator protection on a regular basis every three to four years. This is important because the protective additives in the radiator antifreeze degrades gradually. The antifreeze is preserved for a certain length of time, but comprehensive protection against corrosion is no longer guaranteed without the additives that have been adjusted accordingly to the cooling system.

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Use of the Wrong Radiator Antifreeze

Without radiator antifreeze with the correct additives ideal conditions for corrosion and cavitation prevail in the cooling system due to water, high temperatures and differences in pressure. This means that deep holes can eat into the metal and lead to damage to the cylinder head, cylinder sleeves and the coolingfluid pump and even to failure of the entire cooling system. If the worst comes to the worst this results in engine damage.

If different types of radiator antifreeze are mixed, this can cause interference to the effect of special additive packages. The consequence is a clear decline in protection against radiator corrosion. In the long run the protective layers in the cooling system become thinner and more porous and the intervals between changing radiator protection also become shorter. This is why wrong radiator protection in the wrong vehicle can gradually lead to corrosion and hence to serious damage to the water pump, radiators, hoses and cylinder head gasket. At worst there can also be engine damage if incompatible types of radiator antifreeze are mixed together.

Safety

- BMW/MINI Antifreeze/Coolant has been developed by a leading manufacturer of radiator antifreeze.
- BMW/MINI Antifreeze/Coolant is approved without restrictions for initial and subsequent filling.
- BMW/MINI Antifreeze/Coolant offers comprehensive radiator protection from the very start right up to a high kilometre reading.

Cost Effectiveness

In comparison to other products using the same technology, extended intervals between changing and consequently a comparatively high degree of cost effectiveness are achieved due to the lower additive degradation rates and high level of stability of the product.

Maintenance of Vehicle Value

BMW/MINI Antifreeze/Coolant provides longterm protection against corrosion, overheating and frost for all components of the cooling system and engine. It contributes to the maintenance of the engine for this reason.

Standards

There are no DIN or ISO standards when it comes to radiator antifreeze, but there are a multitude of test descriptions (e.g. ASTM) that are valid throughout the world. BMW Radiator Antifreeze complies with all of them.

Environmental Compatibility / Health

The radiator protection technology used most nowadays throughout the world uses monoethylene glycol (MEG) as a chief ingredient. MEG is biodegradable (see safety data sheet). Nevertheless radiator protection involves chemical products that have to be disposed of professionally after use.

Competitive Comparison

Approval of a radiator antifreeze includes a variety of laboratory tests, engine and fleet tests and usually extends over a period of years.

BMW radiator antifreeze has been used as a single approved product for decades for initial fillings and in the spare parts business.

If non-approved radiator antifreeze is applied, this can lead to the immediate loss of claims under guarantee.