

Product data

Anti-Freeze Anti-Boil

Product Description

Castrol Anti-Freeze Anti-Boil is an ALL YEAR ROUND automotive cooling system treatment, designed to provide complete cooling system protection in a concentration range of 30-50% by volume. Modern engine cooling systems are designed with the fluid characteristics of glycol based coolants in mind.

Castrol Anti-Freeze Anti-Boil is a glycol coolant which reduces cavitation in areas such as the water pump and surface cavitation in hot spots of the cylinder head. The minimisation of cavitation on heat rejecting aluminium surfaces (eg behind exhaust ports) helps control pitting and cavitation erosion and so increases component life. A concentration of at least 30% glycol is required to obtain a significant improvement in cavitation performance. Motor manufacturers normally use a minimum of 33% glycol coolant in new vehicles to achieve satisfactory engine cooling system protection.

Castrol Anti-Freeze Anti-Boil will raise the boiling point and lower the freezing point of the engine coolant. The benefits imparted are resistance to the engine coolant boiling in summer and freezing in winter.

Castrol Anti-Freeze Anti-Boil incorporates additives to guard against corrosion of cast iron, steel, copper and aluminium alloys used for engine and radiator components.

Product Application

Castrol Anti-Freeze Anti-Boil is compatible with materials normally used in automotive cooling systems which include rubber hoses, gaskets, rubber seals and plastic components.

B1035/95/3 replaces B359/89/3



Caution

Castrol Anti-Freeze Anti-Boil is a concentrated product and should only be used diluted with water unless specifically mentioned otherwise by manufacturer, ie do not use at a greater concentration than 70% **Castrol Anti-Freeze Anti-Boil** in water as over heating may occur and corrosion protection may be compromised.

When future top-up of the system is necessary, add only **Castrol Anti-Freeze Anti-Boil** and water mixture at the recommended ratio. Do not mix **Castrol Anti-Freeze Anti-Boil** with other brands of anti-freeze, coolants or corrosion inhibitors because of the possible incompatibility of inhibitors.

Castrol Anti-Freeze Anti-Boil will soften some types of painted finishes. In the event of a spillage, wash off with water immediately.

First Aid

If **Castrol Anti-Freeze Anti-Boil** is accidentally swallowed, contact a doctor or the Poisons Information Centre in your State. Induce vomiting. Use Ipecac Syrup.

Product Features & Benefits

- ◆ Improved engine corrosion protection helping to resist the formation of rust while protecting alloy heads and engines.
- ◆ Improved protection against cavitation in water pumps and hot spots (eg behind exhaust ports) in aluminium cylinder heads.
- ◆ Excellent COLD weather protection.
Castrol Anti-Freeze Anti-Boil reduces the real risk of coolant freezing solid in the engine cooling system and severely damaging engines and/or radiators.
- ◆ Excellent HOT weather protection. **Castrol Anti-Freeze Anti-Boil** helps prevent the risk of the engine coolant boiling, leading to coolant loss and possible engine damage.
- ◆ Due to the above features and benefits, maintenance costs are minimised.
- ◆ Easy to use.

Typical Characteristics

pH 50% v/v Solution	Reserve Alkalinity mL	Boiling Point (undiluted) °C	Freezing Point		Density @ 20°C kg/l	Flash Point (open) °C
			50% v/v °C	25% v/v °C		
7.8	18	>160	-37	-13	1.123	118

Performance Levels

Castrol Anti-Freeze Anti-Boil meets the following requirements:

- ◆ ASTM D3306 General Motors GM 1825 M
- ◆ ASTM D4985 General Motors GM 1899 M
- ◆ ASTM D4656 Mazda MES MN 121 C-FLO1
- ◆ SAE J1034 Chrysler MS 4786
- ◆ AS 2108-84 MWM Diesel D2342/15
- ◆ BS 6580 SAAB FSD 8704
- ◆ JIS 2234 Caterpillar 1 EO 535
- ◆ Ford ESE-FM 97B1 8C Cummins 92T8-9 (diesel and tractor engines)
- ◆ Ford ESE-M97B44-A Nissan NES 5059LLC (automotive)
- ◆ Detroit Diesel Allison 7SE 298

How to Use

Drain and flush previous fluid according to the instructions provided by the vehicle manufacturer. For best results set heater controls to "HEAT" whilst this is carried out.

To remove all traces of old fluid, flush the system with clean water. Remove drain plug or bottom radiator hose as appropriate.

Refer to Owners' Manual for volume of the engine coolant system. Add at least 1/3 (33.3%) of that volume of **Castrol Anti-Freeze Anti-Boil** to the cooling system. Top-up the engine cooling system with soft or demineralised water. This mixture will give effective corrosion protection and freezing protection to -18°C.

Note: Some manufacturers recommend higher minimum concentrations than 33.3% (1/3) of glycol based coolant (anti-freeze), these minimum concentration recommendations should be followed.

For improved anti-boil performance, add 1/2 (50%) of the volume of the cooling system of **Castrol Anti-Freeze Anti-Boil** to the engine cooling system. Top-up with soft or demineralised water. This mixture will raise the boiling point by approximately 9°C and provide freezing protection to -34°C.

Start and run engine for 5 minutes to circulate the fluid. Check for leaks and top-up system with clean water if required. For maximum system protection, replace **Castrol Anti-Freeze Anti-Boil** at least every two years or 40,000 km.

Health, Safety & Environment

Castrol Anti-Freeze Anti-Boil is considered non-hazardous according to Worksafe. However, in line with safe handling practices, it is recommended that the handling instructions outlined in the Castrol Material Safety Data Sheet be followed.

Spillage

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|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Small: | Soak up using an inert mineral adsorbent such as Castrol Diatomaceous Earth and dispose of in the appropriate manner. |
| Large: | Corrective action usually dictated by individual company safety procedures. Immediate containment and subsequent removal is essential. |
| Disposal: | Oily materials must not be allowed to enter groundwater, watercourses, sewerage or drainage systems. Refer to local Waste Disposal Authority for legal requirements. |

Product Removal

- Bare Metal Surfaces:** Remove with Castrol solvent cleaners or water based degreasers.
- Hand Cleaning:** Use any of the Castrol range of hand cleaners, e.g. CareClean Plus.
- Other Surfaces:** Contact your local Special Products Division in each State Office.

Although all reasonable care has been taken to ensure that the information contained in this publication is accurate as at the time of printing, such information is nevertheless liable to variation in the event of changes occurring subsequent to the date of printing it: the blend formulation, methods of storage, or due to the improper handling or application of any of the products referred to, or in the requirements of any specification or approval relating to any of the products.

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