



Radicoool P-OAT

Engine Coolant and Antifreeze

Description

Castrol Radicoool P-OAT is a nitrite, amine, borate and silicate free antifreeze coolant for vehicles requiring Phosphated Organic Additive Technology (P-OAT). Aqueous solutions of Castrol Radicoool P-OAT act as both antifreeze and coolant and offer excellent corrosion protection to all metal parts found in the cooling systems of internal combustion engines.

Castrol Radicoool P-OAT should be used at concentrations of between 33% and 50% dilution with distilled or de-ionised water to give optimum corrosion protection and freezing protection between -16°C and -37°C.

Application

Castrol Radicoool P-OAT has been developed to provide excellent protection for the metals used in engine radiator systems, cylinder block heads, water pumps and heat exchangers.

Castrol Radicoool P-OAT is suitable for use with a wide range of engines including those of aluminium, cast iron or combinations of those two metals. Also suitable for cooling systems made of aluminium, copper or their alloys.

Castrol Radicoool P-OAT is suitable for Japanese and Korean vehicles requiring P-OAT coolants and is also suitable for use where a coolant meeting Ford WSS-M97B57-A1 is required. Castrol Radicoool P-OAT also meets the industry standards of ASTM D3306, ASTM D6210 and JIS K2234.

In the majority of cases, coolants are not compatible and should not be mixed with other coolants unless directed by the equipment manufacturer. If using Castrol Radicoool P-OAT for the first time, ensure that the cooling system has been adequately flushed with clean water.

Advantages

Castrol Radicoool P-OAT has the following advantages:

- Excellent corrosion protection to protect metals used in cooling systems.
- Long life usage – resulting from stable, non-depleting organic inhibitors.
- Superior cavitation protection prevents pitting wear of the cooling system.
- Improved heat transfer through removal of silicates in the formulation.
- Suitable for a wide range of applications, including automotive and heavy-duty.

Typical Characteristics

Name	Method	Units	Radical P-OAT
Appearance	Visual	-	slightly hazy liquid
Colour	Visual	-	dark blue green
Density @ 20C	ASTM D5931	g/ml	1.19
Alkalinity, Reserve of Engine Coolants	ASTM D1121	mg KOH/g	8.9
Water Content Karl Fischer (volumetric)	ASTM D1123	ppm / %	4.0 max
Boiling Point of Engine Coolants	ASTM D1120	°C	160 min.
pH @20°C, 40% vol.	ASTM D1287	N/A	8.0
Freezing point, engine coolants, 40% vol.	ASTM D1177	°C	-23.0

Product Performance Claims

ASTM D3306(I),

ASTM D6210,

JASO JIS K2234

Suitable for use in vehicles from Japanese and Korean manufacturers.

Suitable for use where a coolant meeting Ford WSS-M97B57-A1 is required.

Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

Radical P-OAT

03 Aug 2022

Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, to the extent that it is permissible by law to exclude warranties and representations, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. Refer to the MSDS, available from our website for further information. No responsibility is taken by either Castrol NZ, BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol New Zealand Limited

Technical Advice Line 0800 10 40 60 Customer Service 0800 CASTROL (227 876)

www.castrol.co.nz www.msds.castrol.co.nz