

4804.00

Red Coolant SI-OAT

Engine coolant/anti-freeze based on ethylene glycol, with a corrosion inhibitor package based on organic acids salts and silicates (Si-OAT Coolant). Free of nitrites, amines, phosphates and borates.

Concentrate product. TO BE DILUTED WITH WATER BEFORE USE. Suitable also for latest generation hybrid vehicles.

PAKELO RED COOLANT SI-OAT is an innovative coolant/anti-freeze, easily biodegradable, containing a corrosion inhibitor package based on organic acid salts and silicates (Si-OAT Coolant).

It is free of nitrites, amines, phosphates and borates.

Mono Ethylene Glycol based coolant, PAKELO RED COOLANT SI-OAT effectively protects engine cooling systems against overheating, frost, corrosion and deposits.

Through its special inhibitors the product protects all metallic engine components against corrosion for a longer period than the one of conventional coolants.

PAKELO RED COOLANT SI-OAT provides several properties both to Constructors and to end user.

The use of this special product guarantees:

- better heat transfer properties;
- better compatibility with new generation aluminium heat exchangers;
- reduced maintenance of circuit components (thermostat, radiator, water pump, etc.);
- superior anti-corrosion protection for long periods;
- application in mixed fleets (cars, vans, heavy duty systems, excavators, etc.);
- more environmentally friendly thanks to the easy biodegradability of the product;
- greater reliability due to the highly stabilized inhibitor agents;
- difficult incidental ingestion due to the bitter taste of the product.

Water dilution

PAKELO RED COOLANT SI-OAT is a concentrate product to be diluted with water before use.

It can be mixed with water at any percentage and provides good stability also if mixed with hard waters.

The product should be mixed with demineralized, deionized water or soft water.

It is also allowed the use of not hard tap water (water hardness less than 3,6 mmol/l).

Do not use sea water, waste water, industrial waste water, etc. and water with chloride and sulphate content more than 100ppm each.

The optimal blend of coolant and water is at a 50/50 volume ratio.

In this way frost protection provided is up to -38°C.

To guarantee a good protection against corrosion we recommend the use of coolant in water between 33% and 60% in volume corresponding to a frost protection between -18°C and -55°C.

It is important to prepare coolant/water mix outside of cooling circuit and before filling it.

Miscibility with other coolants

In order to obtain the best performance and longer drain intervals, we recommend using PAKELO RED COOLANT SI-OAT only.

Mixing with other coolants is not recommended.

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Application fields

PAKELO RED COOLANT SI-OAT is a protection fluid for cooling and heat exchange systems of recent and previous generation engines.

The product is particularly recommended for new generation cooling systems using last generation metal alloys and gaskets.

PAKELO RED COOLANT SI-OAT provides longer working life and has been developed for cooling systems of light duty, heavy duty vehicles and stationary engines.

It can also be used in cooling systems of latest generation hybrid vehicles.

Please follow performance levels and approval recommendations to know the suitable application for the product.

For maximum drain intervals (kilometers or operating times, whichever comes first) please follow OEM's Recommendations.

Performance levels

AS 2108-2004, **ASTM** D3306 / D4985, **BS** 6580:2010, **China GB** 29743-2013, **CUNA** NC 956-16, **JIS** K 2234:2006, **ÖNORM** V 5123, **SAE** J1034, **SANS** 1251:2005.

Audi/Bentley/Bugatti/Lamborghini/Seat/Skoda/VW TL 774-G,

Bundeswehr SY7025 acc. to TL 6580-0038-6, **Cummins** CES 14603,

Daimler-Mercedes Benz MB-Approval 325.5 / 325.6 / 326.5 (Ready Mix) / 326.6 (Ready Mix),

Deutz DQC CC-14, **Irizar / S. COOP** from September 2016, **Liebherr** Minimum LH-01-COL3A,

MAN Truck & Bus 324 Typ Si-OAT, **MAN** Diesel & Turbo for High Speed MAN 175D,

MTU MTL 5048 (selected engines), **Porsche** (from MY 1996), **Volkswagen** G12++.

Approvals

MAN 324 Typ Si-OAT, **MB**-Approval 325.5.

Pakelo Recommendations

Audi/Lamborghini/Seat/Skoda/VW TL 774-J, **Volkswagen** G13.

Chemical-Physical Characteristics

Red Coolant SI-OAT	Method analysis	Unit measure	Value
Colour	-	-	magenta
Water content	ASTM D1123	% (w/w)	< 3,0
Ash content	ASTM D1119	% (w/w)	< 2,0
Density at 15°C	ASTM D1122	kg/l	1,128
Boiling point	ASTM D1120	°C	> 163
Reserve alkalinity (pH 5,5)	ASTM D1121	ml(HCl)	8 - 11
pH	ASTM D1287	-	8,2 – 8,6
Foaming at 88°C, break time (v/v - 33gl./67wa.)	ASTM D1881	ml (s)	< 50 (< 3)
Frost protection (50 vol. % solution with water)	-	°C	-38
Frost protection (33 vol. % solution with water)	-	°C	-18

The data just above refer to average values and must not be understood as guaranteed characteristics.

This Technical Data Sheet has been carefully checked to guarantee complete and precise information. However, we do not take any responsibility in case of damages caused by any mistakes or omissions. Due to continual product research and development, the information contained herein is subject to change without notification.