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Coolant G48® Blue Green

Engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use. Hybrid coolant based on organic acid salts and silicates. Free of nitrites, amines, phosphates.

PAKELO COOLANT G48® BLUE GREEN is an innovative anti-freeze/coolant, easily biodegradable, that contains a corrosion inhibitor package based on organic acid salts and silicates (hybrid coolant). It is free of nitrites, amines and phosphates.

Mono Ethylene Glycol based coolant, PAKELCOOLANT G48® BLUE GREEN 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 period superior to that of conventional coolants.

PAKELO COOLANT G48® BLUE GREEN provides several properties both to Constructors and to the end consumer.

The use of this special product guarantees:

- better heat transfer properties;
- better compatibility with new generation aluminium heat exchangers;
- reduced maintenance especially during the warranty period (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.

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Water dilution

PAKELO COOLANT G48® BLUE GREEN is a concentrate product to be diluted in water before use. It can be mixed with water at any percentage and it 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 2,7 mmol/l).
Do not use sea water, waste water, industrial waste water, etc.. and water with chloride and sulphate content more than 100 ppm each.

The optimal blend of coolant and water is at a 50/50 volume ratio.
In this way freeze protection provided is up to -38°C.
To guarantee a good protection against corrosion and at the same time a freeze protection we recommend the use of coolant in water between 33% and 60% in volume.

Please follow the chart below to evaluate freezing protection versus water dilution:

Freeze Protection	Antifreeze content % in volume (out of 100 parts of the blend)
-18°C	33%
-26°C	40%
-32°C	45%
-38°C	50%
-46°C	55%
-55°C	60%

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

Miscibility with other antifreeze products

In order to obtain the best performance and longer drain intervals, we recommend to use only PAKELO COOLANT G48® BLUE GREEN.

Mixing with other coolants is not recommended.

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Application fields

PAKELO COOLANT G48® BLUE GREEN 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 and working with high temperatures.

PAKELO COOLANT G48® BLUE GREEN provides longer working life and it has been developed for cooling systems of light duty, heavy duty and stationary engines.

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.

Standard, Approvals and Performance levels

AS 2108-2004, **ASTM** D3306/D4985, **SAE** J1034, **AFNOR** NF R 15-601, **ÖNORM** V5123, **CUNA** NC956-16,

JIS K 2234:2006, **SANS** 1251:2005, **SH** 0521-1999, **BS** 6580:2010, **BMW/MINI/Rolls Royce** N 600 69.0, **Maybach/Smart/MB-Approval** 325.0 / 326.0 (Ready Mix), **Deutz** H-LV 0161 0188, **Jaguar** VIN 878388, **Jenbacher** TA-Nr. 1000-0201, **Liebherr** TLV 035 / TLV 23009A, **MAN** 324 Type NF, **MAN B&W** List 3.3.7, **MTU** MTL 5048, **Opel/Vauxhall** B 040 0240, **Porsche** (up to 1995 except 911), **Saab** 690 1599, **Tesla**, **Van Hool**, **Volvo Car** 1286083 Issue 002, **Volvo Truck** (up to 2005), **VW/Audi/Seat/Skoda** TL 774-C, **Zastava**.

Chemical-Physical Characteristics

Coolant G48® Blue Green	Method analysis	Unit measure	Value
Colour	-	-	blue-green
Water content	ASTM D1123	% (w/w)	< 3,5
Ash content	ASTM D1119	% (w/w)	< 1,5
Density at 15°C	ASTM D1122	kg/l	1,126
Boiling point	ASTM D1120	°C	> 165
Reserve alkalinity (pH 5,5)	ASTM D1121	ml(HCl)	13 - 15
pH	ASTM D1287	-	7,1 - 7,3
Foaming at 88°C, break time (v/v - 33gl./67ac.)	ASTM D1881	ml (s)	50 (3)
Freezing protection (v/v - 50gl./50ac.)	ASTM D1177	°C	-38
Freezing protection (v/v - 33gl./67ac.)	ASTM D1177	°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.