

ALIGEL HC20 BIO

Ready-to-use antifreeze, with organic inhibition, suggested for solar panels and food plants



DESCRIPTION:

Ready-to-use antifreeze liquid added with fluorescent leak detector. ALIGEL HC20 BIO, as permanent PROPYLENE GLYCOL-BASED antifreeze, does not contain amines, nitrites, phosphates, silicates and borates in its inhibition pack. Contrary, it has a long-term organic inhibition and compared to the common antifreezes it has a very high (doubled) alkaline stock. Easily biodegradable.

Protection of ALIGEL HC20 BIO is suitable for all metals, especially aluminum, his alloys and copper, that are usually the main parts of a cooling or heating system. Specific for food plants and solar panels, diluted with demineralised water as expressly required by the technical Norm UNI 8065:2019.

Moreover, thanks to its formulation it is compatible with all materials constituting heating pumps.

INSTRUCTIONS FOR USE:

Clean carefully the interested parts of the system according to the UNI 8065:2019 norm in force; if needed make a pickling of the pipes with Ferronex or ZInconex-LQ in order to eliminate slags or welding residues. Introduce ALIGEL HC20 BIO into the circuit from the more available point. Make the system run cold for some hours and after the boiler is on, vent carefully from the point where there is scarce circulation.

ATTENTION: for a good anticorrosive protection in general, do not dilute ALIGEL HC20 BIO, but use it as it is, this will allow to the heat exchange fluid to remain unchanged during the periods of stagnation (without circulation) of the system, and also in case of brutal temperature changes.

PHYSICAL-TECHNICAL FEATURES:

	Limits ASTM D 3306	Method ASTM	Data ALIGEL HC20 BIO
Specific weight @ 15 °C	1,030 ÷ 1,065 g/ml	D 1122	1,035 ÷ 1,040 g/ml
Glycol content	---	D 1123	40 %
pH	7,5 ÷ 11,0	D 1287	7,5 ÷ 8,5
Reserve alkalinity	---	D 1121	12 min.
Ashes	2,5 % max.	D 1119	1 % max.
Freezing point	-22 °C	D 1177	-22 °C
Boiling point	---	---	+155 °C @ 5 bar
Refractive index @ 25 °C	---	---	70
Odour	---	---	not offensive
Foaming (ml/sec)	150/5 max.	D 1881	50/2 max.
Water solubility	complete	---	complete
Resistance to hard water	clear	NC 956-14 CUNA	clear
Absolute viscosity @ 20 °C			4,4 Centipoises (mPa·s)
Absolute viscosity @ 60 °C			1,3 Centipoises (mPa·s)
Absolute viscosity @ 100 °C			0,58 Centipoises (mPa·s)

FREEZE PROTECTION / BOILING POINTS:

Freezing point of ALIGEL HC20 BIO is -22 °C.



Boiling point is +103 °C to atmospheric pressure, up to a value of +155 °C with pressure 5 bar.

BEHAVIOUR AGAINST RUBBER SLEEVES AND PLASTIC PARTS:

ALIGEL HC20 BIO, thanks to first distillation PROPYLENE GLYCOL basis and to the choice of additives in its inhibition pack is a very reliable food product against non-metal products making up a heat exchange circuit.

L'ALIGEL HC20 BIO CONFORMS TO THE FOLLOWING NORMS:

ASTM D 3306 – Type 2 (propylene-glycol based antifreeze).



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