



COOLER-PROTECTING AGENT

ADDINOL ANTIFREEZE FG

PRODUCT DESCRIPTION

ADDINOL Antifreeze FG is a high-quality, environmentally friendly and water miscible heat transfer fluid concentrate. It is based on 1,2-propylene glycol and special additives. At respective concentration an effective antifreeze down to -50°C is guaranteed.

APPLICATION

- Outstanding suitability for antifreeze, corrosion and cavitation protection of cooling circuits
- Preferable application in sensitive areas in food and feed industry as well as in the area of drinking water treatment
- Possesses an excellent efficiency at the heat transfer in solar technology and heating installation
- General application at:
 - Cooling and heating systems in food and luxury food industry
 - Heat pumps
 - Sprinkler installations

CHARACTERISTICS

- Biodegradable
- High chemical stability
- Concentrate – miscible with water at will
- Improved corrosion protection
- Protection against overheating
- Neutral to rubber, plastics and varnishes
- Low foaming tendency
- Free from nitrite, amine and phosphate
- Green colour

BIODEGRADABILITY

- According OECD 301 A > 70%

DELIVERY

Delivery preferable in drums.

PLEASE NOTE

For reliable corrosion protection and ideal cooling efficiency the following application concentration should not be exceeded:

- Solar plants: 40 vol%
- General applications: 25 vol%

ADVANTAGES AND BENEFITS

- Environmentally friendly
- Long lifetime of system components
- Required level of antifreeze can be individually adjusted by choosing the respective mixing ratio
- Outstanding protection of pumps and plants
- All-season application, also usable for extended change intervals (up to two years)
- Improved protection against leakages
- Effective protection against foam at practical use
- No health hazards
- No danger of confusion with other function fluids





ADDINOL ANTIFREEZE FG

SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test condition / unit		Antifreeze FG	Method acc. to
Appearance			clear fluid	visual
Colour			green	visual
Basis			1,2-propylene glycol	
Antifreeze down to	max.	°C	-50	
Density	at 20°C	kg/m ³	1055	DIN 51757
Viscosity	at 20°C	mm ² /s	70	ASTM D 7042
Flash point	COC	°C	109	DIN EN ISO 2592
Boiling point		°C	> 150	ASTM D 664
pH value			7.1 to 7.3	similar to DIN 51369
Reserve alkalinity	0.1 M HCl	ml	10 to 13	

ADDINOL Antifreeze FG is a cooler-protecting concentrate, which has to be diluted before application according to the mixing chart below. It must not be used as pure concentrate. It is miscible with water in any ratio.

Mixing ratio (Vol %)		Refraction index n_D^{20}	Antifreeze °C
ANTIFREEZE FG	Water		
25	75	1.3627	- 10
30	70	1.3690	- 13
35	65	1.3747	- 17
40	60	1.3801	- 21
45	55	1.3855	- 26
50	50	1.3910	- 32
55	45	1.3966	- 40

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