

Areometer

Instructions for Use



Antifreeze Determination of TYFOCOR[®] L-Water Mixtures / TYFOCOR[®] LS /G-LS (Ready-to-Use)

Fill the liquid to be checked into the measuring cylinder and bring it to +20 °C.

Draw the areometer from the protective container and immerse it into the fluid. Make sure that the areometer does not touch neither the walls nor the bottom of the measuring cylinder. Add some more liquid if necessary.

Read off the density value (g/cm³) at the liquid level and find the corresponding freezing point as listed below.

TYFOCOR [®] L			TYFOCOR [®] LS (G-LS)		
Density at 20 °C	TYFOCOR [®] L Concentrate [% v/v]	Freezing point	Density at 20 °C	LS or G-LS Ready-to-Use [% v/v]	Frost Protection
1.023	25	- 10 ° C	1.034	100	- 28 ° C
1.029	30	- 14 ° C	Non admissible dilution by water		
1.033	35	- 17 ° C	1.032	95	- 25 ° C
1.037	40	- 21 ° C	1.030	90	- 23 ° C
1.042	45	- 26 ° C	1.028	85	- 20 ° C
1.045	50	- 32 ° C	1.026	80	- 18 ° C
1.048	55	- 40 ° C			
1.055	100 (concentrate)	< - 50 ° C			

Freezing point: initial formation of ice crystals occur at this temperature.

Frost Protection: arithmetic average value of freezing point and pour point.

A minimum concentration of 25 % v/v must be observed for aqueous TYFOCOR[®] L solutions when used for cooling and standard heating purposes. In solar heating equipment, a lower application limit of 40 % v/v must be kept.

TYFOCOR[®] LS /G-LS are ready-to-fill formulations and must not be further diluted by the user. Care must be taken to remove residual (cleansing) water as completely as possible from the solar installation before filling it with TYFOCOR[®] LS or G-LS. Above table, however, gives values for density and frost protection, respectively, in case of accidental dilution of the fluid.



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