



## CERTIFICATE OF ANALYSIS ANTI FREEZE

Anti Freeze Mineral & Organic						
	Test Items		Quality Standard	Unit	Test Method	
1	Physical Appearance		Transparent liquid and without sediment	–	ISIRI 338	
2	Density at 15.5°C		1.110-1.145	g/cm <sup>3</sup>	ISIRI 197	
3	Boiling Point		163 Min.	°C	ASTM 1120	
4	Reserve Alkalinity		Report.	–	ISIRI 1121	
5	Water Content		5 Max.	Mass %	ISIRI 6228	
6	PH		7.5-11	–	ISIRI 1287	
7	Freezing point Temperature for Anti Freeze solution %25		-10 Max.	°C	ISIRI 1448	
8	Freezing point Temperature for Anti Freeze solution %33.3		-14.5 Max.	°C	ISIRI 1448	
9	Freezing point Temperature for Anti Freeze solution %50		-37 Max.	°C	9 ISIRI 1448	
10	Boiling point Anti Freeze solution %50		108 Min.	°C	ASTM D1120	
11	Metal erosion piece	State of metal test piece	Brass	±10	mg	ISIRI 1520
			Copper	±10		
			Aluminum	±30		
			Cast iron	±10		
			Steel	±10		
			Solder	±30		
		Physical Appearance	No visible surface erosion, however, contamination and de coloration are not concerned	–		

\* ISIRI Institute of Standards and Industrial Research of Iran.

\* ASTM American Society for Testing and Materials.