

## **ADECO® FRIZANTIN EKO 100%**

### **Product Description:**

ADECO® FRIZANTIN EKO 100% is concentrated liquid for heat transfer in heating and cooling systems based on propylene glycol. Contains high performance FGA (Food Grade Approved) corrosive inhibitors, each of them is adapted to the type, design and material of the equipment in which it is used. This ensures superior reliability and long service life. ADECO® FRIZANTIN EKO 100% offers maximum protection against corrosion, freezing and dirt collecting. It forms a stable solution with water, what enables mixing with water in any ratio. It is harmonized with contemporary standards of environmental protection, biodegradable and does not pollute the water. Does not contain nitrates, phosphates or amines. It is non-toxic and unharmed!

### **Usage in:**

- ♣ heating and cooling equipment, used in the production of food, beverages and medicines;
- ♣ solar heating systems for drinking water;
- ♣ aggregates for pumps;
- ♣ underground heat exchangers;
- ♣ sprinkler systems;
- ♣ water systems for heating and cooling;
- ♣ central heating systems;
- ♣ heat exchangers for waste heat energy;
- ♣ atmospheric heat exchangers;
- ♣ systems for heating of football fields.

After mixing with water, it can be used in temperature interval from -50 °C to +140 °C, depending on the concentration and operating conditions.

### **The Main Advantages:**

- It is soluble in water and unharmed for environment;
- Contains corrosion inhibitors which protect all metal parts commonly used in heating, solar and cryogenic systems, from corrosion and the limescale deposits formation;
- It promotes the efficient transfer of heat energy, preventing the deposits formation on heat exchangers.

## Physical and Chemical Properties:

Characteristic, Unit	Frizantin Eko 100%	Method
Appearance	<b>Clear, colorless liquid</b>	visual
Boiling Point, °C	<b>&gt;170</b>	ASTM D 1120
Freezing Point, °C	<b>&lt;-50</b>	DIN ISO 3016
Density at 20 °C, g/cm <sup>3</sup>	<b>1,04 – 1,06</b>	DIN 51757
Refractive Index, n <sup>20</sup> <sub>D</sub>	<b>1,433 – 1,438</b>	DIN 51423
Viscosity at 20°C, mm <sup>2</sup> /s	<b>69 - 74</b>	DIN 51562
pH Value	<b>6.5 - 8</b>	ASTM D 1287
Reserve Alkalinity, ml	<b>10 - 13</b>	ASTM D 1121
Flash Point, °C	<b>&gt;100</b>	DIN ISO 2592
Water Content, %	<b>max 4</b>	ASTM D 1123

## Metal corrosion (g/m<sup>2</sup>), according to the ASTM D 1384 method:

Material	Frizantin Eko 100% - water 1:2
Copper (Cu)	max 5
Tin (L Sn 30)	max 15
Brass (Ms 63)	max 5
Cast Iron (GG 26)	max 1.8
Steel (HI)	max 5
Cast Aluminium (G AlSi6Cu4)	max 15
Aluminium (Al 99.5)	max 5

## Mixing Table and Characteristics:

Vol., %	Density, g/cm <sup>3</sup>	Refractive Index, 20°C	Freezing protection, °C
10	1,005	1,3450	-3,5
20	1,018	1,3563	-7,8
25	1,023	1,3627	-10,7
30	1,029	1,3689	-14,0
40	1,037	1,3801	-21,5
50	1,045	1,3910	-32,4
60	1,052	1,4019	-48,4

ADECO® FRIZANTIN EKO 100% contains a very effective mixture of corrosion inhibitors that are individually adapted for use. They provide long-term protection against corrosion and maximum reliability. The corrosion inhibitors performance of the ADECO® FRIZANTIN EKO 100% product exceed the industry standards.



When ADECO FRIZANTIN ECO 100% heat transfer fluid reaches ® its maximum static temperature, there is no problem in solar heating systems, under condition that the system design, materials and heat transfer fluid are adapted for use.

In order to ensure maximum reliability, each batch of ADECO® FRIZANTIN EKO 100% is strictly controlled. Our quality system has ISO 9001 and ISO 14001 certificates. In this way, we provide a consistently high level of product quality.

Reliability of ADECO® FRIZANTIN ECO 100% is an important economic factor in the operation of refrigeration and heating facilities. Long-term operating costs are the deciding factor, rather than the price of heat transfer fluids.

ADECO® FRIZANTIN ECO 100% has a shelf life of at least 3 (three) years in hermetically sealed packaging.

**Meet Specifications:**

SRPS H.Z.2.010 Tip 2; ASTM D3306 Tip 2.

**Packaging:** 10 L, 60 L, 200 L