



# LUZAR AEROTHERMY -5°C

## Thermal fluid for aerothermal heat pumps systems

### APPLICATIONS

Luzar Aerothermy -5°C protects the circuit of the heat pump from:

- Freezing until -5°C.
- Sludge that can restrict the flow.
- Corrosion of metals.
- Deposits.

Luzar Aerothermy -5°C effectively protects copper, brass, black steel, stainless steel and cast iron without pollutant components, it is environmentally compatible and it is not subject to discharge restrictions.

Some of its advantages over conventional products:

- ✓ It incorporates a biocide to avoid sludge of biological origin.
- ✓ Active when the circuit is not operating.
- ✓ Formulated without heavy metals, amine, phosphates, borates, nitrite or nitrate.
- ✓ Biodegradable.

### PROPERTIES

Physical State-Appearance	Transparent Liquid
Color	Blue
Density (20°C)	1,01 1,02 Kg./liter
pH 20°C	7,0 – 8,0
Freezing Point	-5°C
Solubility in water	Totally miscible

### Filling the installation:

The product is presented ready to use, after pressure testing and flush with water to

remove traces of flux and particles, fill with the product.

Do not dilute with water or mix with other kind of antifreeze because the properties would not be guaranteed.

Leaks of product should only be replaced with Luzar Aerothermy.

### STORAGE

Store in their original containers, tightly sealed and without damage. Keep in a dry and well-ventilated place. Protect from direct sunlight and freezing. Range of temperature: from +5°C to +30°C.

In these conditions the product is stable for 18 months from the date of manufacture.

### PRESENTATION

The product is supplied in 20 and 1000 kg containers. Other volumes are available upon request.

### PRECAUTIONS

The product is not classified as dangerous or irritating according to the current legislation. Therefore special precautions are not necessary in the handling of the product.

In agreement with the good industrial practices, it is recommended to avoid the contact of the product with the eyes and the skin. Don't smoke during handling the product. Wash your hands and forearm before eating or drinking after handling the product.

## PHYSICAL-CHEMICAL PROPERTIES

T <sup>a</sup> (°C)	Density (Kg/m <sup>3</sup> )	Specific Heat Capacity (KJ/KgK)	Thermal Conductivity (W/mK)	Dynamic Viscosity (mPas)	Cinematic Viscosity (mm <sup>2</sup> /s)
-5	1019	4,040	0,499	4,39	4,31
0	1018	4,041	0,506	3,52	3,46
5	1017	4,042	0,513	2,88	2,83
10	1015	4,043	0,520	2,39	2,35
15	1014	4,045	0,527	2,01	1,99
20	1012	4,046	0,533	1,72	1,70
25	1010	4,048	0,539	1,49	1,47
30	1008	4,050	0,546	1,30	1,29
35	1006	4,052	0,552	1,15	1,15
40	1003	4,055	0,557	1,03	1,03
45	1001	4,057	0,563	0,93	0,93
50	998	4,060	0,568	0,84	0,84

*Carpemar*