

**IMPORTANT INFORMATION**  
FOR MACHINE MANUFACTURERS

## **EUROGREEN 132 NANO: INNOVATIVE COOLANT LIQUID**



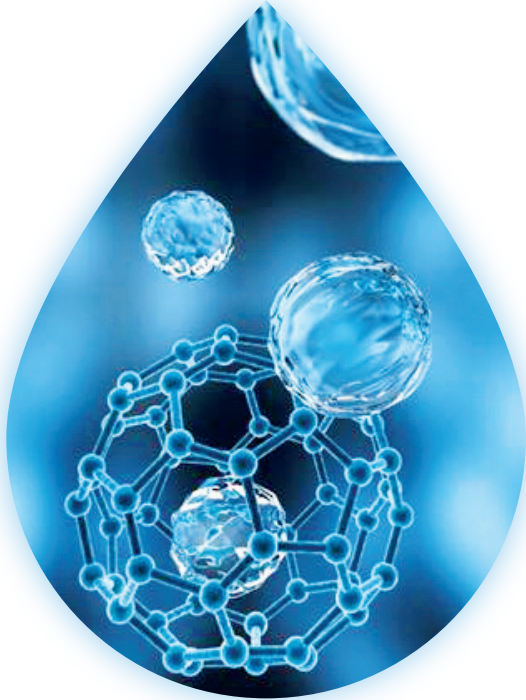
### **FLUID COOLERS**

FOR MACHINE MANUFACTURERS

For **Metal**-processing machines, for **packing** machines for the **pharmaceutical** and **chemical industry**, **printing** machines, for **wood**-processing machines, **laser** cutting machines, **food-industry**, **plastic** and **glass**-processing machines, for **tobacco**-processing machines, **welding**, high frequency **electronic equipment**.

**MADE IN ITALY**

ISO 9001:2015 certified Quality Management System



## EURO COLD SRL

OFFERS ALL ITS CUSTOMERS  
AN INNOVATIVE COOLANT  
LIQUID:

## EUROGREEN 132 NANO, NANOPARTICLE-BASED PRODUCT

FOR HOT AND COLD  
RECIRCULATED CIRCUITS.

The study aimed at increasing the low thermal conductivity of liquids by adding solid particles began more than a century ago, when the scientist James Clerk Maxwell developed a theoretical model of the electrical conductivity of heterogeneous systems of solid particles.

Since then, Maxwell's model has been applied to study the thermal conductivity of mixtures of solid and liquid particles.

The greatest problem in the use of micrometric particles to modify the heat exchange characteristics of liquids is related to the fact that they settle quickly; they also have side effects such as: abrasion, channel clogging and high pressure drops.

**Nanoparticle fluids are a new class of heat transfer fluids that are based on nanotechnologies** and are obtained by dispersing and stabilising nanoparticles with a diameter of less than 100 nm; they are preferable to microparticles because they have the characteristic of remaining more easily suspended in the liquid.

The smaller the size of the nanoparticles, the better the heat exchange capacity.

**The increase in thermal conductivity thanks to the use of a nanofluid translates into an increase in the energy efficiency of the system, better performance and lower operating costs.**

Please contact our sales department.

We will be happy to provide you with any information you may need.



### Eurogreen 132 Nano

**Eurogreen 132 Nano is an innovative ready-to-use coolant based on water and vegetable glycerol and nanoparticles for closed cooling systems.**

The product contains two types of “anti-corrosives”, present in very low quantities, as the nanoparticles enhance their effectiveness within the system; one is plant-based and also acts as an antibacterial agent while the other is chemical derived but in a very low concentration.

It also contains a biocidal product of plant origin.

**Eurogreen 132 Nano** is highly stable and offers advantages both in terms of sliding resistance within the system and from the perspective of thermal storage capacity, with a consequent reduction of the maintenance needs of the systems in which it is used. It does not require the use of other products to clean the system.

CHARACTERISTICS
Does not contain Glycol
High thermal capacity
It is highly stable and has no deposits
Reduces the friction of moving parts
ADVANTAGES
Non-polluting
Disposes of heat faster
Keeps the circuit clean thanks to the presence of nanoparticles
Lower power consumption
Possibility to resize the radiator system
BENEFITS
Lower operating costs
No power loss
Reduction of consumption
Reduces maintenance
Prevents breakages (pump and circuit)
Reduction in energy costs



**EURO COLD srl (Headquarters)**  
 Via Aldo Moro, 11/E - 41030 Bomporto (MO) Italy  
 Tel. +39.059.817.8138 - Fax +39.059.817.0482  
 info@eurocold.it - eurocold@hersypec.it  
**www.eurocold.it**

**EURO COLD C.S. GmbH**  
 Im Speiterling 12 - Kelttern 75210, Germany  
 Tel. +49.7236.981.048 - Fax +49.7236.981.113  
 vertrieb@eurocold.de  
**www.eurocold.de**