CryoSol® plus
HIGH-CAPACITY COLD SUPPLY FLUID AND COLD STORAGE MEDIUM [+5 TO +45°C]

Existing cooling systems are reaching their storage- and transport capacity fast. The application of CryoSol® plus – with a 2 to 3 times higher storage capacity than water – increases the performance of existing cold storage and cold supply networks by enhancing the storage and transport capacity.

CryoSol® plus is used in the temperature range between 5 and 20 °C as an alternative to cold water and between 25 and 45 °C as a heat transfer medium and storage medium, respectively.

Keywords
• Heat transfer fluid with high energy density and capacity
• Thermal storage
• Process cooling
• Air-conditioning
• Mobile cooling

Industrial sectors
• Producing industry
• Air-conditioning/building cooling
• Chemical industry
• Cooling appliances, cold storage depots
• Food industry
• Automobile manufacturers
Cooling medium emulsion

CryoSol® plus.

Capillary tube mats.

Your benefit

• Higher storage capacity with existing cold storage tanks and low temperature heat storage tanks
• Increase of transport capacity of existing cold supply networks
• More flexibility in view of operating availability due to the increased storage capacity
• Precise tempering of sensitive processes accurate to the degree

Our service

• CryoSol® plus tailor-made - Cold or low-temperature heat storage tailor-made for your application
• CryoSol® plus as a retrofit for cold water storage systems
• Engineering and installation of cold supply systems based on CryoSol® plus

Technological specifications

• CryoSol® plus is a hybrid energy storage medium based on dispersed phase change materials (PCM)
• Apart from the sensitive heat, CryoSol® plus also uses the latent heat of a phase changing process, of paraffin in a paraffin/water emulsion.
• CryoSol® plus remains liquid in a phase changing process, because of the dispersion of PCM in water;
• CryoSol® plus is neither flammable nor toxic
• Energy density of CryoSol® plus with 25 weight-% paraffin is approx. 50 kJ/kg for comparison:
  cold water (6 to 12 °C) has an energy density of 25 kJ/kg, i.e. CryoSol® plus is twice as good

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