



Concerned products and equipment

- Isothermal packaging
- Refrigerant packaging
- Coolers
- Vaccine carrier
- Small containers
- Eutectic plates

Standards and technical reference documents

- NF S 99-700 - Isothermal and refrigerated packaging for health products- Qualification method of the thermal performance
- WHO PQS protocols - Category E004 - Isothermal containers, cold boxes and vaccines
- NF EN 12 571 - Thermal requirements and hygiene containers used for transport of foodstuffs
- CERTICOLD Pharma



- Protocols and customer specifications

Accreditation and recognition

- World Health Organization -
 - > Certification according to the PQS repository
 - > Testing and certification materials for the cold chain
- Laboratories accredited by COFRAC according to standard ISO 17025



Services

- ✓ Packaging qualification according to standard profiles or according to specific profiles
- ✓ Study of the influence of the load in maintaining the cold
- ✓ Modeling

Means

- ✓ Measurement stations of temperature
- ✓ Thermostatic chambers
- ✓ Charges tests

Additional features

- ✓ Temperature: from -40°C to +90°C
- ✓ Studies for different rate of loading

Test principle

- ✓ The qualification of a packaging consists in checking that a packaging helps maintain the temperature of the products transported within a specified temperature range, conditions implemented (packaging configuration, load transported ...), temperature atmosphere (variable or not) and duration.



Best uncertainty of the means used
0.20 °C (k=2)



WHY CHOOSE CEMAFROID FOR THIS SERVICE?

- ✓ Metrological means covering all industrial needs.
- ✓ Laboratories recognized by the WHO.
- ✓ Tests included in the CERTICOLD Pharma certification.



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