

A Single-Use Solution



Single-Use packaging

The Gyrotainer was first processed to facilitate the transport by road of frozen horse semen in liquid nitrogen. Built with basic and highly recyclable raw materials, this conditioning system, very similar to ordinary cartboard packaging, integrates a gyroscopic system allowing the cryogenic reservoir it contains to remain permanently in a vertical position. This solution is the only single-use alternative to traditional reusable shippers.



Air Transport

Taking in consideration the IATA rules, Cryogena has developed a « Dry Shipper » range which is exempted of any specific declaration for the transport of dangerous goods. The liquefied gas integrated into the absorbing substrate is the best solution for international express exchanges (UPS, DHL,

Fedex, etc) because it induces no supplementary constraint compared to ordinary shipping (no additional cost, no delay).

American Market

Cryogena has just launched the Cryodrum, which appears as a carton boarded conditioning system providing higher capacity and autonomy. Its dimensions enable the introduction of « cryocans » of all sizes, which is a well known American standard cell-conditioning. The Cryodrum will be perfectly adapted to intercontinental shipments.

The start up company has developed an original transport packaging system based on the use of liquid nitrogen to simplify the logistics of shipping biological samples.

Cryogena Delivers Cryopreserved Materials

Cryopreserved materials require for transport temperatures inferior or equal to -80°C . 93 per cent of the total exchange volume are shipped with dry ice. A simple polystyrene box is enough to pack the dry ice and the biological samples it contains. Even if dry ice is economic, the quality of the samples after shipment is not satisfying. It is generally accepted that 50 per cent of the material are useless after transport due to a strong fluctuation of the temperature in the box. Only sensitive biological material which require very low temperature (inferior at -130°C), are today using liquid nitrogen as a refrigerant for transport. This is the case for animal cells, oocytes, embryos, semen, but also blood serum, some

vaccines, viruses, bacteria, and vegetal essences and other bacillus used in yoghurt-making. Even if liquid nitrogen is a « must » for the conservation of biological samples, the cost to acquire any reusable shippers and to manage the logistics, they need to be ship back, is a constraint for the convenience of the cold supply chain. Cryogena, a French start-up launched with the support of ANVAR in 2003 is certainly bringing something new to the pharmaceutical and biotech industries with its « one-way » solution, combining both the reliability of the liquid nitrogen and the flexibility of dry ice. « At the beginning, we focused on the innovative material solution, less sophisticated, but as reliable as metal, and on how to maintain the verticality of the container in a context of important handling, »

notes Raphaël Cocu, Cryogena's Trade Manager. Comforted with 4500 units sold in its historic niche, the company based in Alençon today innovates with a new Cryodrum range. « Shipping cryopreserved biologic samples by air is very difficult for any pharmaceutical company, notes Raphaël Cocu. Compared to dry ice, our Dry-Shipper solution is not submitted to the legislative constraints linked to the transport of dangerous goods, – this contributes to save time and money when dealing with express shipping. » There is no doubt that Cryogena is now offering to pharmaceutical companies a complete and competitive solution for cryogenic transports, allowing one concept to meet all the needs of a fast evolving industry. ■

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