Transport Container

TECHNICAL MANUAL



Custom BioGenic Systems

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Leading the World with Innovative Cryopreservation Technology Solutions

IMPORTANT!

The following section on LIQUID NITROGEN SAFETY should be read carefully and followed completely, but is by no means a complete volume on the use of cryogenic liquids. All personnel should have a complete knowledge of the correct procedures, as well as the hazards of working with liquid nitrogen. Failure to do so could result in serious injury or death.

WARNING

LIQUEFIED GASES ARE EXTREMELY COLD LIQUIDS. LIQUID NITROGEN EXISTS AT -196°C. BECAUSE OF THESE TEMPERATURES, LIQUEFIED GASES WILL "BURN" IF THEY COME INTO CONTACT WITH SKIN. NEVER ALLOW DIRECT SKIN CONTACT WITH LIQUID NITROGEN OR SERIOUS BURNS WILL RESULT.

ALTHOUGH LIQUID NITROGEN ITSELF IS NON-TOXIC, WHEN RELEASED IN TO A CONFINED SPACE IT CAN DISPLACE OXYGEN CAUSING ASPHYXIATION. ENTERING AN OXYGEN DEFICIENT ROOM CAN CAUSE UNCONSCIOUSNESS WITHOUT WARNING. ALWAYS CHECK AIR QUALITY UPON ENTERING A ROOM WHERE CRYOGENIC LIQUIDS ARE BEING USED AND IF POSSIBLE, HAVE A RESPIRATOR AVAILABLE.

INTRODUCING EQUIPMENT WHICH IS AT ROOM TEMPERATURE INTO LIQUID NITROGEN IS ALWAYS SOMEWHAT HAZARDOUS. BEWARE OF SPLASHING AND "BOILING" WHICH MAY OCCUR. ALL PERSONNEL PERFORMING THESE OPERATIONS SHOULD BE FULLY INFORMED OF PROPER HANDLING PROCEDURES AND SHOULD ALWAYS WEAR A FACE SHIELD AND PROTECTIVE CLOTHING.

LIQUEFIED GASES SHOULD NEVER BE USED IN COMBINATION WITH OTHER SUBSTANCES WITHOUT KNOWING WHAT THE RESULT WILL BE. WHEN IN DOUBT, CONTACT A COMPETENT AUTHORITY.

HANDLING

Personnel handling liquefied gases should be thoroughly instructed as to the nature of these materials. Proper training is essential to safety and will ensure the accident-free use of this equipment.

Because of their low temperatures, liquefied gases will burn the skin much the same way as hot liquids can. For this reason, always wear the proper protective clothing when handling these materials. It is advised that during use, handlers of liquid nitrogen should protect themselves by wearing goggles or face shields, heavy rubber gloves large enough to allow quick removal and a heavy rubber apron. It is preferable that shoes worn at these times have high tops as to not permit accidently spilled liquid from entering as well as pant legs which come down over the tops of shoes for further protection.

Also because of the extremely low temperatures, liquid nitrogen should only be handled and transported in approved containers. Many materials become brittle and may shatter when put into contact with liquid nitrogen and other cryogenic liquids.

FIRST AID

In the event a person is burned by liquefied gas, the following first aid treatment should be given while awaiting the arrival of medics or a doctor:

1. If the material has contacted skin or eyes, flood those areas with large quantities of unheated water and protect frozen areas with loose, bulky, dry and sterile dressings.
2. If the skin is blistered or there is a chance that the eyes have been affected, seek medical help immediately.

- PREPARATION FOR USE -

The CF-9511 Transport container is primarily used for moving frozen samples over shorter distances, such as from one lab to another.
To be certain that you samples are transported safely from one location to another there are a few things you can do to prepare the container for use.

1. If your transport container is at room temperature you should fill it with liquid nitrogen for one hour before use. This will cool and stabilize the container temperature.

2. After the container has stabilized, place the samples in the container. Refill with liquid nitrogen if necessary being careful not to overfill. Do not fill to the top, allow 2 inches for the lid.



Liquid Nitrogen Usage & Capacity	
Liquid Nitrogen capacity *(liters)*	10.5
Static evaporation rate *(liters/day)*	3.3
Static holding time *(days)*	3
Interior Dimensions	
Usable inside diameter *inches (mm)*	9 (228.6)
Usable inside height *inches (mm)*	9 (228.6)
Exterior Dimensions	
Width *inches (mm)*	10 (254)
Depth *inches (mm)*	10 (254)
Height *inches (mm)*	17 (431.8)
Weight empty *lbs.(kg)*	13 (5.9)
Weight full *lbs.(kg)*	32 (14.5)



CF-9511 Shown with optional Cryo-Cart

LN2 Level Stick





"Y" Connector

Phase Separator



"T" Valve





Cryo Gloves



Canes and Straws





Low Level Alarm Multiplex

- IMPORTANT INFORMATION -

We at Custom BioGenic Systems are proud of our work, and appreciate your purchase of this product. With proper care, this equipment will be trouble-free for many years to come. Before setting up and using your new cryogenic system, first check to see that all parts are accounted for and that no damage has occurred during shipping. Also, read this manual completely before proceeding to set-up. If at any time you are unsure of the procedures for set-up and use of this product, please contact CBS or your CBS representative.

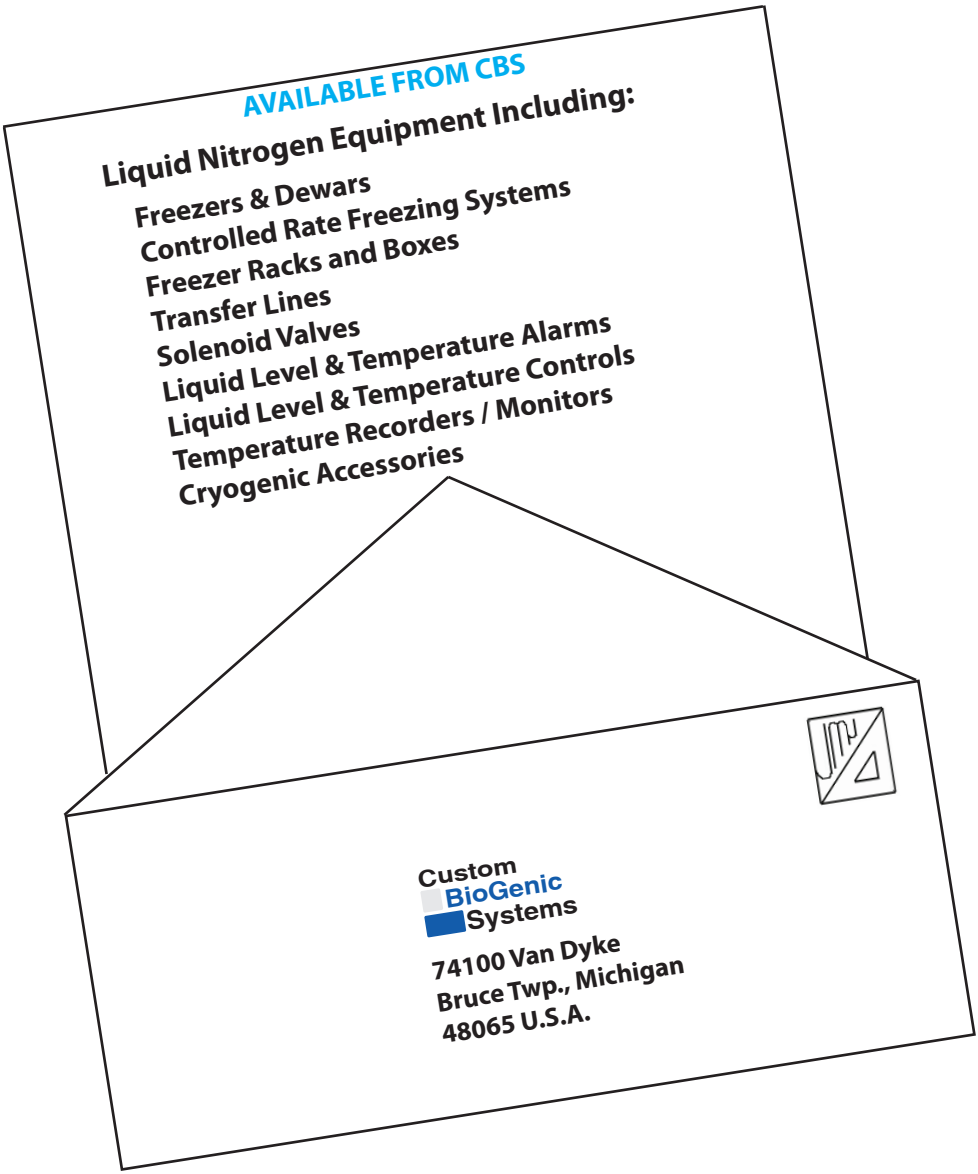
PRODUCT WARRANTY

Custom BioGenic Systems warrants all manufactured cryogenic equipment to be free from defects in workmanship and materials for a period of one year.
Custom BioGenic Systems' liabilities under the warranty shall be limited to correcting or replacing the defective workmanship or materials. A claimant under the warranty must notify Custom BioGenic Systems within ten (10) days after discovery of the defect and immediately discontinue use of the defective equipment.
Custom BioGenic Systems reserves the right, at their discretion, to correct the defect(s) in the field without return shipment to Bruce Twp., Michigan.
This warranty does not cover defects on cryogenic equipment resulting from abusive handling and subsequent failure.

Serial Number_____

Model number_____

For Technical Assistance Call: 1.800.523.0072 (U.S. Only)
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CF9511.TM

Revision: Original

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