

# Liquid Nitrogen Transfer System

## Model 021

- *Transfers liquid nitrogen or argon from a non-pressurized storage Dewar*
- *Discharge rate is adjustable up to 3 liters/min.*
- *Transfer starts and stops immediately*
- *Insulated, flexible transfer line*
- *Very convenient for initial filling of Dewars used with gas adsorption instruments and for "topping off" Dewars during extended analysis.*
- *Storage Dewar static holding time up to 30 days*
- *Easily rolled to any receiving vessel or along a line of receiving vessels*
- *Small footprint conserves space*



LN<sub>2</sub> Transfer System Model 021

Micromeritics' Model 021 LN<sub>2</sub> Transfer System was developed for convenience when filling Dewars for gas adsorption instruments; however, it is just as useful for any number of tasks around research, development, or control operations where frequent cryogen needs arise. This system eliminates pressurization of a cryogen storage Dewar previously needed to force the cryogen through a discharge line.

The Model 021 LN<sub>2</sub> Transfer System makes it easy to fill Dewars with liquid nitrogen (or argon) for laboratory

or general purposes. Flow starts and stops immediately when the system is turned on or off. The discharge rate is adjustable to a maximum flow of 3 L/min. The discharge line is insulated to prevent frosting and icing during use, and flexible to allow easy positioning for discharge into almost any type of receiving vessel. Stored cryogen is transferred by a centrifugal pump having its rotor submerged near the bottom of the storage Dewar. The drive motor is in the control/transfer unit which is positioned by centering and stabilizing guides to rest on the

top flange of the storage Dewar, well above the cryogenic liquid. The 4.9-kg (11-lbs) unit needs only to be lifted out of the way when filling the storage Dewar.

The system includes a mobile platform which easily rolls from location to location. The control/transfer module requires 100/120 or 220/240 VAC with 50/60 Hz, selectable with a built-in universal power connector.

# Specifications

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## Storage Capacity

47 liters

## Recommended Cryogens

Liquid nitrogen

Liquid argon

## Electrical

Voltage: 100/110 220/240 VAC

Frequency: 50 to 60 Hz

Power: 100 VA

## Weights

Storage Dewar (empty): 16.3 kg (36 lbs)

Control/transfer Unit: 4.9 kg (11 lbs)

Mobile Platform: 5.4 kg (12 lbs)

## Transfer Method

Centrifugal pump

## Ordering information

Part #: 021-00000-00

Complete system includes storage Dewar, mobile platform, control/transfer unit, and 2.3-meter (7.5-ft) power cord



In keeping with a policy of ongoing product improvement, specifications are subject to change without notice.