





**Drysphere™** is a new high technology, dust-free, spherical, activated alumina manufactured and designed to optimize dessicant performance.

#### SPHERICAL ALUMINA PARTICLE

#### Benefits:

- Easy to pack, very convenient to use
- Very permeable
- Suitable for use in lab/pilot/process
- Dry, dust-free configuration
- 1/8" and 1/16" spheres (Sizes from 6mm, 3mm, or 1mm-3mm)

#### **DUST FREE**

#### Benefits:

- Will not contaminate gas/liquid streams with particulates
- Suitable for lab/pilot/process preparation of dust-free, dry streams

# **HIGH CAPACITY**

## Benefits:

- Adsorbs 36% of its own weight, three times more than "standard" Alumina, 20% more than Silica, 32% more than Drierite
- Obtain drier samples, faster, for a longer period of time reduces down-time

#### **WIDE SCOPE**

#### Benefits:

- Dry Gases and Liquids, use directly in HPLC solvent reservoir to keep solvent dry for constant baseline.
- Gases: CO<sub>2</sub> Acetylene, Air, Argon, Ethylene, Helium, Hydrogen, N<sub>2</sub>, O<sub>2</sub>, etc.
- Liquids: Benzene, CCI<sub>4</sub>, Ethylacetate, Hexane, Oil, Pentane, Transformer oils, Xylene, etc.
- Dehydrate acidic gases and liquids without softening or breakage

## **ADSORPTIVE PROPERTIES**

### Benefits:

- Cleans organics while it dries
- · Preferentially adsorbs high polarity impurities

# KINETIC PROPERTIES

30 Minute Exposure To 97% Relative Humidity

	Weight
	% Gain
Dryshere	3.5%
P <sub>2</sub> O <sub>5</sub>	3.0%
CaSO <sub>4</sub>	2.6%
Silica Gel	2.3%
Alumina	1.6%

# KINETIC EXPOSURE TEST

Static @ 11% 12 RH
Adsorption @ 58% 22 RH
(wt%) @ 97% 36 RH

# PHYSICAL PROPERTIES

Abrasion Loss (wt%) 0.1 Crush Strength (lb) 30 Bulk Density (lbs/ft³) 48

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The **DrySphere<sup>™</sup>** Gas Filter (dryer and desiccant) is designed to remove water, oil and other heavy hydrocarbons from inert carrier gases such as nitrogen, helium, or argon. A mixture of **DrySphere<sup>™</sup>**, and an indicating desiccant are contained within the transparent Dynamic Adsorbents' canister. The **DrySphere<sup>™</sup>** desiccant will change color from orange to green with the absorption of moisture. The color change is readily observed through the Dynamic Adsorbents' cartridge body indicating a need for refilling.

The **DrySphere™** Disposable Gas Filter is offered only in the 200 cc capacity with the inline configuration, and is approximately 7" long by 2" in diameter. Both of these units are designed for a nominal flow rate of 5 liters per minute.

## Refill Kit Catalog no. 200-01001

The **DrySphere**<sup>™</sup> cartridge in the refillable filters is easily refilled by removing the exhausted filler mixture and replacing it with the **DrySphere**<sup>™</sup> Refill Kit, an inexpensive and easy-to-use premixed refill of new materials.

# **DrySphere™** Gas Filter



New:
Refillable gas cartridges for Drysphere™
Catalog No. 203-01001
Refill Kit for Cat. No. 201-01001 Cartridge
20% indicator 500 grams Cat. No. 200-01001



New:
Disposable gas cartridges for Drysphere™
Catalog No. 201-01001

Each unit is tested at 125 psi, and can withstand temperatures up to 100°F



