

# Disk Drive Adsorbent Label Filter (ALF)

## Product Guidelines & Specifications

### Description

The Adsorbent Label Filter (ALF) is comprised of a filtration membrane, adsorbent element, and pressure-sensitive adhesive for securing the filter to the inside of the drive.

### Principle of Operation

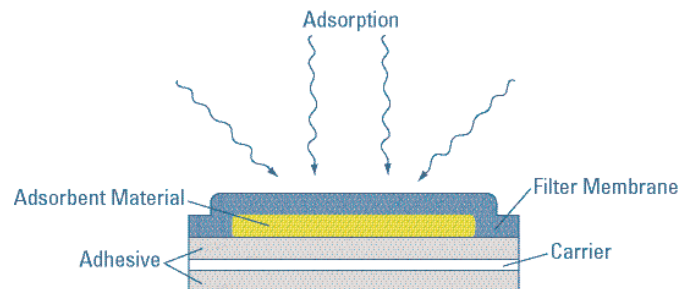
The ALF is designed to provide protection from hydrocarbons, humidity, and acid gases in a thin label format. The high efficiency filtration membrane encapsulates the adsorbent element while remaining permeable to gaseous contamination. The adsorbent element is specially formulated to control humidity and to adsorb acid gases and hydrocarbons from internal and external sources. The most common adsorbents and their associated functions are as follows:

- **Activated Carbon:** Relative humidity control and adsorption of hydrocarbons
- **Chemically Treated Activated Carbon:** Relative humidity control and adsorption of acid gases and hydrocarbons
- **Silica Gel:** Relative humidity control

### Installation in Drive

The ALF is attached to the inside of the drive and is ideally suited for applications requiring a low-profile filter. Because the adsorption mechanism is diffusion-based, the label can be located anywhere inside the disk drive assembly.

When using an ALF filter, it is recommended that diffusion protection be incorporated into the drive. Diffusion protection reduces the amount of hydrocarbons, water vapor, and acid gases entering the drive from the surrounding environment.



## Parameter

## Specification

Porous Membrane MVTR  
(Moisture Vapor Transmission Rate)

950 g/m<sup>2</sup>/24-hour minimum per ASTM E96 wet cup

## Packaging

Release Liner

Polyester with a release coating.  
Silicone-free coating option available.

Roll Configuration

2000 - 5000 parts per roll on polyethylene cores

Inner Bag

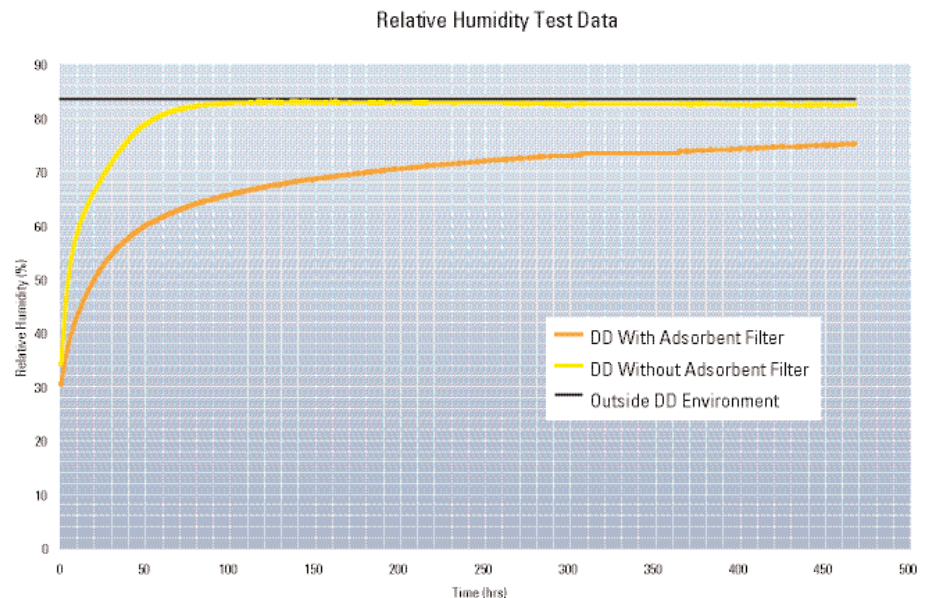
Level 100 cleanroom bag free of silicone,  
amides, and DOP per NVR/FTIR

Outer Packaging

Inner cleanroom bag enclosed in metalized vapor  
barrier bag

## Contamination Control

Available on a silicone-free release liner. Adhered with a permanent high-temperature, low-outgassing, pressure-sensitive adhesive. Designed to pass the most stringent cleanliness specifications. Manufactured in a cleanroom environment.



**Contact Donaldson today for more information!**



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