Desiccant



Desiccant is a drying agent used to lower the moisture content of air inside a closed space, such as a Moisture Barrier Bag (ANSI/ESD S11.4 Level 1 and Level 2 Static Control Bags). Desiccant is packaged in fractional units in order to facilitate its usage with a variety of bag sizes. One full "unit" of packaged desiccant will absorb the following quantities of water at equilibrium with air at 77°F (25°C): 3.00 grams @ 20% rH and 6.00 grams @ 40% rH, when tested to MIL-D-3464.

In order to provide a complete moisture barrier packaging assembly, desiccant must be inserted into the bag, prior to having the bag vacuum sealed. The recommended amount of desiccant is dependent on the interior surface area of the bag to be used. The table is a reference indicating recommended minimum amounts of desiccant that should be used with Moisture Barrier Bags.



13840 & 13850

"...it is important to take possible temperature exposure into account when shipping electronic parts. It is particularly important to consider what happens to the interior of a package if the environment has high humidity. If the temperature varies across the dew point of the established interior environment of the package, condensation may occur. The interior of a package should either contain desiccant or the air should be evacuated from the package during the sealing process. The package itself should have a low WVTR." (ESD Handbook ESD TR20.20 section 5.4.3.2.2)

DESCO

INTERIOR BAG	NUMBER OF DESICCANT UNITS		
SURFACE AREA*	**MIH <20%	MIH <30%	MIH < 40%
100 sq. in.	1.5	1.0	1.0
130 sq. in.	2.0	1.5	1.0
160 sq. in.	2.0	1.5	1.5
200 sq. in.	2.5	2.0	1.5
240 sq. in.	3.0	2.0	1.5
290 sq. in.	4.0	2.5	2.0
340 sq. in.	4.5	3.0	2.5
390 sq. in.	5.0	3.5	2.5
450 sq. in.	5.5	4.0	3.0
510 sq. in.	6.5	4.5	3.5
580 sq. in.	7.5	5.0	4.0
650 sq. in.	8.0	5.5	4.0
720 sq. in.	9.0	6.0	4.5

Table for recommended desiccant usage. Information taken out of EIA-583, Table 1, Page 8.

Desiccant paks are available from Desco in the following unit sizes and standard

Item #	Unit Size	Std. Package	Dimensions
13840	1/2 unit	Box of 700	1.5" x 3" '
13843	1 unit	Box of 450	2" x 4"
13844	1 unit	Pail of 300	2" x 4"
13850	1/2 unit	Pail of 550	1.5" x 3" '

As packaged Desco 13850 meets MIL-D-3464, Type II and is on the QPL (Qualified Product List).

Fill Contents: Activated Clay

Paper: Tyvek

3 Years from date of manufacture Warranty:



Specifications and procedures subject to change without notice.

Desiccant Pak

DESCO WEST: 3651 WALNUT AVE., CHINO, CA 91710 WEBSITE Desco.com PHONE (909) 627-8178

DESCO EAST: ONE COLGATE WAY, CANTON, MA 02021-1407 PHONE (781) 821-8370

DRAWING NUMBER 13850

DATE: December 2013

^{*}To measure interior bag surface area, multiply length x width x 2

^{**}MIH = Maximum Interior Humidity (%)