

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](#).



13844



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)

INTERIOR BAG SURFACE AREA*	NUMBER OF DESICCANT UNITS		
	**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.

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

**MIH = Maximum Interior Humidity (%)

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

Item	Unit Size - Dims	Std. Package
13840	1/2 unit - 1.5" x 3"	Box of 700
13844	1 unit - 2" x 4"	Pail of 300
13850	1/2 unit - 1.5" x 3"	Pail of 550

As packaged Desco 13850 meets MIL-D-3464, Type II and is on the QPL (Qualified Product List). Click [here](#) to see Desi-Pak (supplier Cage Code 00334).

Fill Contents: Activated Clay
Paper: Tyvek
Warranty: 3 Years from date of manufacture



Made in the United States of America

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	DRAWING NUMBER 13850	DATE: July 2021
DESCO EAST: ONE COLGATE WAY, CANTON, MA 02021-1407 PHONE (781) 821-8370		



DESCO SAFETY DATA SHEET

May be used to comply with ANSI Z400.1-2004, and Globally Harmonized System (OSHA Hazcom 29 CFR 1910.1200, (EU) No.453/2010 and Japan JIS 7253:2012). Standards must be consulted for specific requirements.

Revision Date: 2018-02-16

SECTION 1 — IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product Name: Desi Pak
EC No.: None
REACH Registration No.: None
CAS No.: None

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use: Desiccant

1.3 Details of the supplier of the safety data sheet

Supplier: Desco
3651 Walnut Ave
Chino, CA 91710
(909) 627-8178
Email Address: Service@Desco.com

1.4 Emergency telephone number

Emergency Number: (909) 627-8178

SECTION 2 — HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

No reportable hazardous components as defined by the Globally Harmonized System (OSHA Hazcom 29 CFR 1910.1200, (EU) No.453/2010 and Japan JIS 7253:2012).

2.2 Label elements

Not a dangerous substance according to GHS.

2.3 Other hazards

None known.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

No reportable hazardous components as defined by the Globally Harmonized System (OSHA Hazcom 29 CFR 1910.1200, (EU) No.453/2010 and Japan JIS 7253:2012).

SECTION 4 — FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled	No treatment specified. In case of irritation when dust is inhaled, provide for plenty of fresh air.
In case of skin contact	When used and handled appropriately no special measures are needed.
In case of eye contact	No special precautions required.
If swallowed	No emergency care is anticipated. If large quantities of this material are swallowed, call a physician immediately. Call your local Poison Control Center (In the U.S. call 1-800-222-1222).

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	The possible symptoms known are those derived from the labelling (see section 2). No additional symptoms are known.
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Hand protection	Impervious rubber such as neoprene, nitrile, natural rubber, butyl rubber, PVC, or teflon.
Eye protection	Follow facility guidelines in the absence of dusts.
Skin and Body protection	Wear protective clothing, including long sleeves and gloves, to prevent skin contact. Thoroughly wash clothing before reuse. Use of proper hygiene practices in the workplace is recommended.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid form
Color:	Various
Odor:	None
Odor Threshold:	Not available
pH:	Not determined
Melting point/range:	Not determined
Boiling point/boiling range:	Not determined
Flash point:	Does not flash
Evaporation rate:	Non-volatile
Upper explosion limit:	Not applicable
Lower explosive limit:	Non applicable
Vapor pressure:	Non applicable
Vapor density relative to air:	Non applicable
Density:	Not determined
Bulk density:	Not determined
Solubility (Water):	No data available
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity (dynamic):	Not applicable
Viscosity (kinematic):	Not applicable

9.2 Other information

None known.

SECTION 10 — STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11 — TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure

None known.

Acute toxicity

Product:

Acute oral toxicity Remarks: Not applicable

Carcinogenicity

IARC Not listed

OSHA Not listed

NTP Not listed

Experience with human exposure

Product:

General Information The possible symptoms known are those derived from the labelling (see section 2).

SECTION 12 — ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Product:

Additional ecological information According to experience and to the information currently available, the product has no harmful effects on the environment if used correctly as intended.

SECTION 13 — DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

RCRA - Resource Conservation and Recovery Authorization Act This product, if discarded as sold, is not a Federal RCRA hazardous waste.
Processing, use or contamination of this product may change the waste management options.
State and local disposal regulations may differ from federal disposal regulations.

Water Code NONE

Waste from residues Dispose of this product in accordance with all applicable local, state and federal regulations.

SECTION 14 — TRANSPORT INFORMATION

DOT Not restricted

IATA Not restricted

IMDG Not restricted

14.1 UN Number	N/A
14.2 UN proper shipping name	N/A
14.3 Transport hazard class(es)	N/A
14.4 Packing group	N/A
14.5 Environmental hazards	N/A
14.6 Special precautions for user	See SECTIONS 6 to 8 of this Safety Data Sheet.
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	No transport as bulk according IBC - Code.

SECTION 15 — REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	No SARA Hazards
SARA 302	No Chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	This product is not subject to SARA Title III Section 313 reporting requirements under 40 CFR 372.

Clean Water Act

Contains no known priority pollutants at concentrations greater than 0.1%.

The components of this product are reported in the following inventories:

TSCA	All components of this product are listed or excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Inventory.
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15.2 Chemical Safety Assessment Not relevant

SECTION 16 — OTHER INFORMATION

HMIS RATING	Health 0, Flammability 0, Reactivity 0, Personal Protection B
NFPA RATING	Special Hazard: N/A, Health: 0, Flammability: 0, Instability: 0
SDS Updated	2018-01-04

Disclaimer

OTHER INFORMATION: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.