

3M™ Desiccant

Desiccant Loading on Page 2

Plastic or Kraft Paper Pouch

This efficient desiccant begins its work by absorbing air borne moisture left inside the bag when you've finished vacuum packaging. Then it captures moisture that manages to pass through the bag material. Secured in a strong envelope of either clean room compatible, sulphur-free non-woven Plastic or economical Kraft Paper, desiccant helps keep your devices dry, even through unexpected shipping delays or longer than anticipated storage time.

Specifications

Typical Values

Pouch: Kraft paper or non-woven plastic
 Print: Blue ink
 Unit sizes: 1/6, 1/3, 1/2, 1, 2, 4, 8, 16
 Media: montmorillonite clay
 Form: Free flowing even when fully saturated.
 Packaging: Air tight pails or drums



Plastic Pouch (Plastic)



Pouch Size	Part Number	Pouches per Container	Container Weight (pounds)	Pouch Size			
				Width (in)	Length (in)	Width (mm)	Length (mm)
1/6 Unit	1/6PLDES1200	1200	20	2.125	2.125	54	54
1/3 Unit	1/3PLDES700	700	22	2.125	2.50	54	64
1/2 Unit	1/2PLDES550	550	25	2.125	2.875	54	73
1 Unit	1PLDES300	300	28	3.00	4.50	76	114
1 Unit	1PLDES1300	1800	157	3.00	4.50	76	114
2 Unit	2PLDES150	150	32	5.00	4.50	127	114
2 Unit	2PLDES800	800	135	5.00	4.50	127	114
4 Unit	4PLDES500	500	156	5.00	6.250	127	159
8 Unit	8PLDES300	300	194	4.50	8.50	114	216
16 Unit	16PLDES150	150	184	4.50	11.00	114	279

Kraft Pouch (Paper)



Pouch Size	Part Number	Pouches per Container	Container Weight (pounds)	Pouch Size			
				Width (in)	Length (in)	Width (mm)	Length (mm)
1/6 Unit	1/6KDES1200	1200	20	2.375	2.75	57	70
1/3 Unit	1/3KDES700	700	22	2.375	3.125	60	79
1/2 Unit	1/2KDES550	550	24	2.375	3.50	60	89
1 Unit	1KDES300	300	27	3.00	4.50	76	114
1 Unit	1KDES1300	1300	128	3.00	4.50	76	114
2 Unit	2KDES150	150	32	5.00	4.50	127	114
2 Unit	2KDES800	800	150	5.00	4.50	127	114
4 Unit	4KDES500	500	156	5.00	6.250	127	159
8 Unit	8KDES300	300	200	4.25	8.50	108	216
16 Unit	16KDES150	150	184	4.50	10.60	114	269

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture at the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.** This product is not on the Qualified Product Listing under the Defense Standardization Program.

PRODUCT DATA SHEET

Desiccant in Plastic or Kraft Paper Pouch

PRODUCT
DESICCANT, PLASTIC OR KRAFT POUCH

ITEM NUMBER
SEE ABOVE

DATASHEET
1110-H

3M Electronics Solutions Division
 6801 River Place Blvd
 Austin, TX 78726-9000
 US and Canada: 866-722-3736
 Fax: 866-722-3735
 Intl: 919-718-0000; Fax: 919-774-8174
 email: 3Mstaticinfo@mmm.com; www.3Mstatic.com © 3M 2011. All rights reserved.

3M is a trademark of 3M Company.
 All other trademarks herein are the property
 of their respective owners.



Calculating Desiccant Loading

What is Desiccant?

Desiccant is a drying agent that is used to absorb moisture from the air inside moisture barrier bags. Desiccant absorbs moisture vapor (humidity) from the air left inside the barrier bag after it has been sealed. Moisture that penetrates the bag will also be absorbed. Desiccant remains dry to the touch even when it is fully saturated with moisture vapor.

How much Desiccant do I need?

Desiccant is sold by the "Unit" or fractional Unit, or in grams. One unit of desiccant will absorb a specific amount of moisture. A unit weighs about 33 grams. There are several standards for calculating the desiccant loading for bags. Each standard is for a specific application, and requires different amounts of desiccant for the same bag size. You must determine which standard most closely matches your particular application, if any, and apply the appropriate formula, or ask your 3M representative for our spreadsheet Desiccant Calculator.

Why are electronic devices moisture sensitive?

Certain kinds of electronic devices called "Surface Mount Devices" or SMD's are mounted on a circuit card by high temperature soldering. The body of the SMD is made from plastic that absorbs moisture from the air. When the case is heated during soldering, the moisture inside turns to steam, and may break the device as the steam escapes. Keeping SMD's dry before soldering helps prevent the devices from being damaged.

IPC/JEDEC J-STD-033**Application:**

Dry packaging for SMD's.

What You Need Know:

Bag Size, Bag MVTR, Storage Time in Months.

Formula:

Units= $\frac{0.304 \times \text{Months} \times \text{Bag MVTR} \times \text{Bag Area}}{\text{Moisture Capacity}}$

Example:

8" x 10" inch Barrier Bag, with a 0.002 MVTR and a 12 month storage time.

Find Bag Area:

8" x 10" x 2 sides =160 sqin.

Apply Formula:

Units= $\frac{0.304 \times 160 \text{ sqin} \times 0.002 \text{ MVTR} \times 12 \text{ months}}{6.6667 \text{ g/unit}}$

Units = .2 Use 1/6 unit of Desiccant.

EIA 583**Application:**

Dry packaging for SMD's. Allows adjustment of environmental conditions.

What You Need Know:

Bag Area, Bag MVTR, Months of Storage, Maximum Interior Humidity (MIH).

Formula:

Units= $\frac{0.231 \times \text{Bag Area} \times \text{Bag MVTR} \times \text{Months}}{\text{Moisture Capacity}}$

Example:

8" x 10" inch Barrier Bag, with a 0.02 MVTR, a 12 month storage time, and a MIH of 20%.

Find Bag Area:

8" x 10" x 2 sides =160 sqin.

Select Moisture Capacity based on MIH:

10% MIH: 3.0 g/unit 20% MIH 4.8 g/unit 30% MIH 5.8 g/unit 40% MIH 6.2 g/unit

Apply Formula:

Units= $\frac{0.231 \times 160 \text{ sqin} \times 0.02 \text{ MVTR} \times 12 \text{ months}}{4.8 \text{ g/unit}}$

Units = 1.8 units Use 2 units of desiccant.

MIL-P-116**Application:**

General dry packaging.

What You Need Know:

Bag Size

Formula:

Units = 0.011 x Bag Area in square inches.

Example:

8" x 10" inch Barrier Bag

Find Bag Area:

8" x 10" x 2 sides =160 sqin.

Apply Formula:

Units = 0.011 x 160 sqin = 1.8

Use 2 Units of desiccant.

P R O D U C T D A T A S H E E T

Desiccant in Plastic or Kraft Paper Pouch**PRODUCT**

DESICCANT, PLASTIC OR KRAFT POUCH

ITEM NUMBER

SEE PAGE 1

DATASHEET

1110-H

3M Electronics Solutions Division

6801 River Place Blvd

Austin, TX 78726-9000

US and Canada: 866-722-3736

Fax: 866-722-3735

Intl: 919-718-0000; Fax: 919-774-8174

email: 3Mstaticinfo@mmm.com; www.3Mstatic.com © 3M 2011. All rights reserved.

3M is a trademark of 3M Company.

All other trademarks herein are the property of their respective owners.



Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9