

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

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.





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.