

Desiccant Bags

TYDES

Description

Desiccant bags are used for protecting packaging and enclosure contents that are susceptible to damage from moisture. Desiccant bags are a drying agent which attract moisture from the atmosphere. The bags contain natural bentonite clay with no additives and are filled with high active agents; offering the ideal solution for protecting moisture-sensitive goods such as printed circuit boards, integrated circuits and SMDs. The desiccant's absorption capacity can be as high as 30% of its weight. It absorbs and holds particles of water to itself. For maximum effectiveness, desiccants should be used within a closed/sealed moisture barrier bag. The activated clay is environmentally friendly as it is chemically inert and non-toxic for metal or any material which makes it safe to handle and therefore can be easily disposed of. The clay desiccants are packed in Cleanroom compatible, sulphur-free Tyvek bags for use in the electronic industry. 1 unit = 35grams of clay.



Key Features









- For moisture damage prevention
- Activated clay is eco-friendly, chemically inert and non-toxic
- To be used in ESD packaging of moisture sensitive devices - according to MILD3464E and JEDEC J-STD-033 standards
- The clay desiccants are packed in Cleanroom compatible, sulphur-free Tyvek bags for use in the electronics industry
- Low dust tear proof bags or dust free paper bags are available
- 1 unit = approx 35 grams of clay
- Conforms to IEC-61340-5-1, DIN55473 and KMIL-D3464E standards

Part Code

Description

TYDES05	Half unit (Pack of 1000)
TYDES1	One unit (Pack of 500)
TYDES2	Two unit (Pack of 250)

ESD Standards & Regulations Met

 RoHS compliant	 DIN55473
 REACH compliant	 IEC 61340-5-1
 European Conformity	 KMIL-D3464E
 BS7529:1991	 PRC military GJB2714-96

Humidity Indicator Cards

The addition of a Humidity Indicator Card allows a visual check of the humidity levels inside enclosures or packaged items. This also gives a fast evaluation of the desiccant's performance.



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Natural Bentonite Clay

The desiccant clay is an effective and inexpensive static desiccant, which is enclosed in Tyvek, it will absorb moisture from sealed spaces to prevent corrosion and mould growth. It is widely used in military industries, precision instrument machinery electric and metal products, pharmaceutical, clothing and foodstuff leather. Bentonite clay is a naturally occurring mineral as opposed to a chemically synthesised absorbent. Therefore it is more economical than silica gel or molecular sieves. The performance curve exceeds both industry standards, and the silica gel performance curve for these same specifications. At 20% RH, the activated clay bags will absorb 50% more moisture than required by industry standards, whereas silica gel will only absorb 3.5% more moisture than industry standards require. The packaging is sealed inside a waterproof and moisture vapour-proof container with the inclusion of a desiccant to prevent rust, mildew or corrosion damage. In Method II packaging, the package is maintained at a safe humidity below 40% RH during the normal storage period of 18 months to 2 years.

Properties	Value
Bulk density g/L \geq	810
Moisture % \leq	1.0
PH value	7.0 + 0.5
25°C RH = 20% % \geq	13.00
25°C RH = 40% % \geq	18.00
25°C RH = 80% % \geq	25.00
Size	0.5 – 1.5mm, 1- 4mm (> 95%)
Clay	Natural bentonite clay with no additives which conforms to BS7529:1991. It is a free flowing material with particle size 1- 4mm.
Sachet	The sachet material is heat-sealed 55 gsm Tyvek with an 11 gsm coating. The sachet is approximately 135 x 80mm in size. Tyvek is an extremely tough, durable sheet of spun bonded polyethylene fibres. The sachet is filled with the desiccant clay such that it has an absorptive capacity of 2 units as defined by the German DIN 55473 and US Mil-D- 3464 specifications.
Printing	Standard sachets are printed DESSICCANT CLAY, 2 UNITS DO NOT EAT PACKAGING- 250 sachets per heavy gauge polythene bag with a releasable tie inside a carton. Up to 50 cartons per pallet.
Appearance	Purple and white, natural granular.
Standard	PRC military GJB2714-96 and as above.

** Tyvek is a registered DuPont trade name. ** Desiccant unit is the weight of desiccant which will absorb at 25°C 3 gram of water vapour at 20% Relative Humidity (R.H) and 6 grams at 40% R.H