Adhesive Mats

Part Number: VTXXX/4P30L-B/W/G









Description: Valutek multi-layered low density polyethylene adhesive mats can effectively capture dirt and dust from foot-traffic and equipment wheels before they enter a cleanroom or controlled environment. Each removable layer of Valutek adhesive mats has a specially developed adhesive coating designed to provide an effective means of reducing contamination by trapping and preventing the transfer of particles.



Application: Valutek provides mats that are suitable for Macrotek, Microtek and Nanotek applications. The mats are ideal for a wide range of applications including cleanroom entrances, gowning rooms, laboratories or work stations that require high levels of contamination control. Adhesive mats are widely used in a variety of industries including semiconductor, biotechnology, medical device, pharmaceutical, aerospace, automotive and construction.

Mat Physical Properties

Attribute	Value (Metric Units)	
Adhesive	Acrylic (Water Based)	
Film Thickness		
First Cover Sheet (clear)	0.04 mm ± 0.004mm	
Disposable Sheet (colored)	0.04 ± 0.003 mm	
Bottom Cover Sheet (clear)	0.04 ± 0.004 mm	
Adhesive Strength		
Active Layer Adhesive Strength	150 ± 25 g/25mm	
Mat Backing Adhesive Strength	500 ± 50 g/25mm	
Tensile Strength		
Horizontal	> 10 Mpa	
Vertical	> 8 Mpa	
Elongation		
Horizontal	> 150%	
Vertical	> 200%	
Heat Resistance	60 °C/48 hours	
Cold Resistance	-13 °C/48 hours	



Valutek Asia Sdn. Bhd

Valutek P.R.C.

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Sizes, Colors and Packaging

Available Sizes	Standard Color	Special Order Color	Packaging
18" x 36"	White/Blue	Grey	30 sheets / mat, 4 mats / case
18" x 45"	White	Grey/Blue	30 sheets / mat, 4 mats / case
24" x 36"	White/Blue	Grey	30 sheets / mat, 4 mats / case
26" x 45"	White/Blue/Grey	-	30 sheets / mat, 4 mats / case
36" x 36"	White	Grey/Blue	30 sheets / mat, 4 mats / case
36" x 45"	White/Blue	Grey	30 sheets / mat, 4 mats / case
36" x 60"	White/Blue	Grey	30 sheets / mat, 4 mats / case
36" x 72"	White/Blue	-	30 sheets / mat, 4 mats / case

Storage and Environmental Conditions

■ Correct Storage Orientation

Valutek adhesive mats must be stored in a horizontal orientation and stacked with care. When stored vertically or with heavy objects on top of them, the mats can become damaged or distorted. Damaged film can be identified in the form of bubbles and veins between the mat layers. These bubbles and veins cause the mat to have an irregular surface, which leads to delamination of the mat from the floor and reduced mat performance.

■ Product Shelf Life

Under appropriate environmental storage conditions, Valutek adhesive mats will retain a high performance for up to 6 months from manufacture date, after which, mat adhesion performance will reduce gradually over time.

■ Environmental Conditions

Care and consideration must be taken as to adhesive mat environmental storage conditions. Valutek mats use a water based adhesive. Extreme cold hardens the mat adhesive and renders it ineffective. Short-term extreme cold will not cause permanent damage but the mat must be allowed to re-equilibrate or 'warm up' to a minimum of 32 $^{\circ}$ F before installation and use. Extreme heat will result in the mat adhesive breaking down and will cause permanent mat damage at temperatures over 105 $^{\circ}$ F.

Product Performance

To ensure the best performance of Valutek adhesive mats, the mat layers should be changed at the correct frequency depending on the following factors: The number of operators, number of "passes" (1 person walking across a mat one time, with each foot having full contact once with the mat), environment class and quantity of particulates captured. Valutek recommends changing a mat layer after every 50 passes.

