

TYVEK (1422A) MATERIAL

Formal spec. sheets are not available but these are the physical properties for 1422A.

Property	Test Method	Result
Thickness	ASTM D1777	5.9 mils
Basis Weight	ASTM D3776	1.2 oz/yd ₂
Burst Strength - Mullen	ASTM D774	50 psi
Tear Resistance - Trap Tear (MD)	ASTM D5733	6 lb _r
Tear Resistance - Trap Tear (CD)	ASTM D5733	5 lb _r
Breaking Strength - Grab (MD)	ASTM D5034	18 lb _r /in
Breaking Strength - Grab (CD)	ASTM D5034	22 lb _r /in
Hydrostatic Head	AATCC 127	45 inches H ₂ O
Surface Resistivity (25°C / 55% RH)	ASTM D257	< 6.3 x 10 ⁹ ohms/square
Wearing Apparel Flammability	16 CFR 1610 ⑦	Class 1

*Typical values, not specifications.

Also typical properties for "1422A" can be found on SafeSPEC™ using the link below. The "Fabric Data" tab contains the typical values for physical properties.

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Fabric particle barrier

Particle barrier is measured by exposing a fabric to a particle challenge and then determining the penetration of particles through the fabric by means of a particle counter. The particle counter determines the number of particles which have penetrated through the fabric per defined size range (see figure 1).

DuPont has measured the particle barrier of TYVEK® (style 1422A) to Aloxite dust according to a proposed European test method and to Chrysotile asbestos fibres according to a Haskell laboratory test method.

Particle barrier data for TYVEK® (style 1422A)

Measured according to CEN/TC 162 WG3 N263 test method using Aloxite dust and a pressure differential across the fabric of 1 Pa. Data from the Institute of Occupational Medicine (UK) (see table 1).

Asbestos fibre barrier data for TYVEK® (style 1422A)

Haskell laboratory test method – data from the DuPont Haskell Laboratory using Chrysotile asbestos fibres (see table 2).

Protection against blood and blood-borne pathogens

TYCHEM® C has passed penetration tests according to ASTM F1670 and ASTM ES22 at 2 psi (≈ 14 kPa) with synthetic blood and surrogate viruses so that it may be used to protect against body fluids, blood and blood-borne pathogens.

TYVEK® (style 1422A) passes ASTM F1670 and ASTM F1671 when conducted at a pressure of 1 psi (7 kPa).

(ASTM F1670 and ASTM F1671 test method numbers have been changed to ASTM F1670 and ASTM F1671 respectively.)

Fig. 1 Test chamber

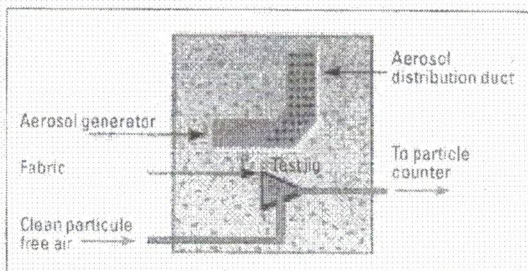


Table 1 Particle barrier of TYVEK® (Style 1422A)

Particle size (μm)	Challenge concentration (No. pcles/litre)	Penetration flux (No. pcles, $\text{min}^{-1}, \text{m}^{-2}$ per 1000 pcles, l^{-1})
1.0–1.5	47 042	1
1.5–2.0	10 384	2
>2.0	7 054	0

Table 2 Asbestos fibre barrier of TYVEK® (Style 1422A)

Fibre length	Mean fibre challenge (fibres/ mm^2)	Mean asbestos fibre barrier efficiency (%)
All fibre lengths	41 558	99.08
All fibres longer than 0.5 μm	36 584	99.18

