

Permeation Guide for Selected DuPont™ Tychem® Protective Fabrics

Chemical Warfare Agents

Permeation test results are shown as follows: > = greater than
 Average Breakthrough Time (minutes) <= less than
 Minimum Detectable Permeation Rate (pg/cm²/min) nt = not tested

Agent	Common Name	CAS Number	Protocol	Tychem SL	Tychem 7500	Tychem F	Tychem BR and Tychem LV	Tychem TK
GA	Tabun	77-81-6	DN5	nt	nt	nt	>720 8X10 ⁷	>720 8X10 ⁷
			DN6	nt	>720 2X10 ⁶	>720 2X10 ⁶	nt	>720 4X10 ⁷
GB	Sarin	107-44-8	DN5	360 1 X 10~	nt	nt	>720 4.2 X 10~	>720 4.2 X 10~
			DN6	nt	>720 2X10 ⁶	>720 2X10 ⁶	>720 4X10 ⁴	>720 1X10 ⁶
GD	Soman	99-64-0	DN5	nt	nt	nt	>720 4.2X10 ⁷	>720 2.1X10 ⁷
			DN6	nt	>720 2X10 ⁶	>720 2X10 ⁶		>720 4X10 ⁷
HD	Sulfur Mustard	505-60-2	DN3	180 0.002	nt	nt	>720 4.2 X 10~	>720 0.00021
			DN4	nt	>720 <0.002	>720 <0.002	>720 8 X 10~	>720 8 X 10~
L	Lewisite	541-25-3	DN3	>360 8 X 10~	nt	nt	>720 2.5 X 10~	>720 0.0000125
			DN4	nt	360 0.006	360 0.006	120 7 X 10~	>720 8 X 10~
VX	VX Nerve Agent	50782-69-9	DN5	>720 ~ X 10~	nt	nt	>720 4.2 X 10~	>720 2.1 X 10~
			DN6	nt	>720 2X10 ⁶	>720 2X10 ⁶	>720 8X10 ⁷	>720 8X10 ⁷

Fabric Test Protocols.

All tests performed in triplicate for DuPont Personal Protection by an independent accredited laboratory at 22° C, 50% R.H.

Protocol DN3 .MIL-STD-282, Method T-209 (HD) or modified for Lewisite, for 12 hours at 10 g/m².

Protocol DN4 .MIL-STD-282, Method T-209 (HD) or modified for Lewisite, for 12 hours at 100 g/m² (total coverage).

Protocol DN5 .MIL-STD-282, Method T-208 (GB) or modified for GA, GD, and VX, for 12 hours at 10 g/m².

Protocol DN6 .MIL-STD-282, Method T-208 (GB) or modified for GA, GD, and VX, for 12 hours at 100 g/m² (total coverage).

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