

Chemical Warfare Agents

Permeation test results are shown as follows:												
Average Breakthrough Time (minutes) Minimum Detectable Permeation Rate (µg/cm ² /min)												
Age	Common Name	CAS Number	Protocol	Tychem® CPF 2	Tychem® SL	Tychem® CPF 3	Tychem® F	Tychem® CPF 4	Tychem® BR and Tychem® LV	Tychem® Responder®	Tychem® TK	Tychem® Reflector®
GA	Tabun	77-81-6	DN5						>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷
			DN6				>720 2 X 10 ⁻⁶				>720 4 X 10 ⁻⁷	
GB	Sarin	107-44-8	DN5	360 1 X 10 ⁻⁵	360 1 X 10 ⁻⁵	120 0.004		360 1 X 10 ⁻⁵	>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷
			DN6				>720 2 X 10 ⁻⁶		>720 4 X 10 ⁻⁴	>720 4 X 10 ⁻⁴	>720 1 X 10 ⁻⁶	>720 4 X 10 ⁻⁴
GD	Soman	99-64-0	DN5			>480 0.004			>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 2.1 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷
			DN6				>720 2 X 10 ⁻⁶				>720 4 X 10 ⁻⁷	
HD	Sulfur Mustard	505-60-2	DN3	180 0.002	180 0.002	120 0.004		180 0.002	>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 0.00021	>720 4.2 X 10 ⁻⁷
			DN4				>720 <0.002		>720 8 X 10 ⁻⁴	>720 8 X 10 ⁻⁴	>720 8 X 10 ⁻⁴	>720 8 X 10 ⁻⁴
L	Lewisite	541-25-3	DN3	>360 8 X 10 ⁻⁴	>360 8 X 10 ⁻⁴	120 0.005		>360 8 X 10 ⁻⁴	>720 2.5 X 10 ⁻⁵	>720 2.5 X 10 ⁻⁵	>720 0.0000125	>720 2.5 X 10 ⁻⁵
			DN4				360 0.006		120 7 X 10 ⁻⁵	120 7 X 10 ⁻⁵	>720 8 X 10 ⁻⁴	120 7 X 10 ⁻⁵
VX	VX Nerve Age	50782-69-9	DN5	>720 5 X 10 ⁻⁷	>720 5 X 10 ⁻⁷	>480 0.0042		>720 5 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷	>720 2.1 X 10 ⁻⁷	>720 4.2 X 10 ⁻⁷
			DN6				>720 2 X 10 ⁻⁶		>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷	>720 8 X 10 ⁻⁷
Fabric Test Protocols. All tests performed in triplicate for DuPo 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/m ² . Protocol DN4 - MIL-STD-282, Method T-209 (HD) or modified for Lewisite, for 12 hours at 100 g/m ² (total coverage). Protocol DN5 - MIL-STD-282, Method T-208 (GB) or modified for GA, GD, and VX, for 12 hours at 10 g/m ² . Protocol DN6 - MIL-STD-282, Method T-208 (GB) or modified for GA, GD, and VX, for 12 hours at 100 g/m ² (total coverage).												
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Permeation Guide for DuPont™ Tychem® Fabrics
Effective June 2004. This guide replaces all previously published until superseded.

For more information about DuPont Personal Protection

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