3M Personal Safety

3M[™] 4570 Protective Coverall

Advanced Barrier Protection

The 3M^{°°} 4570 Protective Coverall, certified as a 'Type 3' garment, uses an advanced film technology to offer a high level of both chemical hold out and mechanical strength giving the wearer confidence in their protection.

The Power to Protect Your World[™]



4570

3M[™] 4570 Protective Coverall

The 3M 4570 Protective Coverall is a high performance chemical protective suit, certified to Type 3, 4, 5, 6 levels of protection, making it suitable to help protect against a range of chemical jets and sprays. With additional design features including an enlarged zip and thumb loops, an integrated double-closing stormflap system and chin flap, convenience of use can be offered without compromising the high level of protection offered.



Key Features

- Advanced film technology
- Soft material reducing noise from movement
- Excellent levels of chemical hold out and mechanical strength
- Certified to offer protection against radioactive particulates (EN 1073-2) and infective agents (EN 14126)
- Achieves highest class performance on all tests in EN 14126
- Anti-static treated (inside only) to EN 1149
- Seams are taped with a multi layer co-extruded clear tape, which offers a discreet finish and a consistent seal and barrier to hazardous dusts and high pressure liquid jets
- Thumb loops for secure fit during overhead work
- Three-panel hood design with chin flap for a better fit and compatibility with other PPE
- Two stormflaps combined with double colour-coded zips to create a double seal for added convenience and extra protection
- Large ring-pull zippers for easy donning and doffing when wearing gloves
- Elastic waist is adhered with glue to minimise potential entry points
- Elasticated wrists and ankles for convenience and freedom of movement
- Available in 7 sizes, Small 4XL



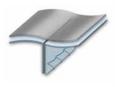
Fabric material

The 3M 4570 Protective Coverall uses a 92gsm heavy-duty material blending a soft anti-static treated inner layer of spun bond fibres with multiple outer layers of a high performance polyethylene laminate, to offer a high level of liquid protection.



Seam Technology

Seams are stitched and overtaped with a clear heat applied 5-layer chemically protective tape to offer increased strength and an effective barrier to liquids and particulates.







Power to Protect your World





Type 3 EN 14605: 2005 +A1 : 2009 Protective performance against liquid chemicals



+A1 : 2009

Type 4 EN 14605: 2005

Protective performance

Type 3-B, 4-B, 5-B, 6-B EN 14126 : 2003 Biological protection (infective agents)



Type 5 EN ISO 13982-1: 2004 Protective clothing for use against solid particulates



EN 1073-2:2002 TIL Class 2 Protection against nuclear particles



Type 6 EN 13034: 2005 +A1: 2009 Protective clothing against liquid chemicals



EN 1149-1: 2006 EN 1149-5: 2008 Anti-static



Application*

Popular Choice

- Chemical mixing and handling
- Chemical / oil spills and clean up
- Metal Refining
- Metal Etching
- Hazardous Waste Remediation
- Decontamination / Site Decommissioning
- Tank Cleaning
- Infective agents / Biological Hazards
- Handling Toxic Powders

Suitable for Consideration

- Pesticide spraying
- Pharmaceutical Processing

Interpreting the permeation data

EN14325 Classification		ANSI 103 Classification		
Class 6	>480 mins	Н	>480 mins	
Class 5	>240 mins	М	>120 mins	
Class 4	>120 mins	L	>30 mins	
Class 3	>60 mins			
Class 2	>30 mins			
Class 1	>10 mins			

The test methods referenced in the 3M 4570 Protective Coverall Fabric and Seam Permeation Data table on the following page are EN 374 and ASTM F-739. EN 374 reports the breakthrough detection time at a permeation rate of 1.0 μ g/cm² and refers to the EN 14325 classification in the adjacent table. ASTM F-739 reports the normalised breakthrough detection time at a permeation rate of 0.1 μ g/cm² and refers to the ANSI 103 classification also detailed in the adjacent table. You can also find both of the normalised permeation rates of 0.1 μ g/cm² and 1.0 μ g/cm² reported in EN ISO 6529.

3M[™] 4570 Protective Coverall Fabric and Seam Permeation Data

	Fabric		Seam		
Chemical		EN374-3 classified to EN14325	ASTM F739 classified to ANSI103	EN374-3 classified to EN14325	ASTM F739 classified to ANSI103
	CAS Number	1uq/cm ²	0.1ug/cm ²	1ug/cm ²	0.1ug/cm ²
2-(2-aminoethoxy) ethanol 98%	929-06-6	Class 6	Not Tested	Class 6	>480 (H)
2,4-Difluoroanaline 99%	367-25-9	Class 3	Not Tested	Class 1	0 mins
2-Chloroethanol 99%	107-07-3	Class 6	Not Tested	Class 6	0 mins
2-Ethylhexanoic Acid 99%	149-57-5	Class 6	Not Tested	Class 6	average 102 mins (L)
Acetic Acid 30% (ethanoic acid)	64-19-7	Class 6	Not Tested	Class 6	>480 (H)
Ammonium Hydroxide 30%	1336-21-6	Class 6	Not Tested	Class 1	0 mins
Aniline 99% (phenylamine, aminobenzene)	62-53-3	Class 5	Not Tested	Class 5	average 11 mins
Dimethyl Sulphate 98%	77-78-1	Class 6	Not Tested	Class 6	>480 (H)
Dimethylformamide (DMF)	68-12-2	Class 6	>480 (H)	Class 6	average 54 mins (L)
Ethylene Glycol 99.5%	107-21-1	Class 6	Not Tested	Class 6	>480 (H)
Formaldehyde 10%	50-00-00	Class 6	Not Tested	Class 6	>480 (H)
Formic Acid 96%	64-18-6	Class 6	Not Tested	Class 6	average 16 mins
Hydrazine Monohydrate 98%	7803-57-8	Class 6	Not Tested	Class 6	>480 (H)
Hydrobromic Acid 48%	10035-10-6	Class 6	Not Tested	Class 6	>480 (H)
Hydrochloric Acid 37%	7647-01-0	Class 4	Not Tested	Class 4	average 36 mins (L)
Hydrofluoric Acid (71-75wt%)	7664-39-3	Class 4	Not Tested	Class 5	average 132 mins (M)
Hydrofluoric Acid 48%	7664-39-3	Class 6	Not Tested	Class 6	>480 (H)
Isopropyl alcohol 99.5%	67-63-07	Class 6	Not Tested	Class 6	average 9 mins
Mercuric Chloride sat. soln.	7487-94-7	Class 6	Not Tested	Class 6	>480 (H)
Mercury	92786-62-4	Class 6	Not Tested	Class 6	>480 (H)
Methanol	67-56-1	Class 2	0	Class 6	0 mins
Nitric Acid 70%	7694-37-2	Class 6	Not Tested	Class 6	average 7 hours (M)
Phenol 85% soln.	108-95-2	Class 6	Not Tested	Class 6	>480 (H)
Phosphoric Acid 85%	7664-38-2	Class 6	Not Tested	Class 6	>480 (H)
Potassium Chromate (saturated soln.)	7789-00-6	Class 6	Not Tested	Class 6	>480 (H)
Sodium Bisulphate 40% soln.	7681-38-1	Class 6	Not Tested	Class 6	>480 (H)
Sodium Fluoride Saturated soln.	7681-49-4	Class 6	Not Tested	Class 6	>480 (H)
Sodium Hydroxide 40wt%	1310-73-2	Class 6	Not Tested	Class 6	>480 (H)
Sodium Hypochlorite (13% chlorine)	7681-52-9	Class 6	Not Tested	Class 6	>480 (H)
Sulfuric Acid 30wt%	7664-93-9	Class 6	Not Tested	Class 6	>480 (H)
Sulfuric Acid 93.1 wt%	7664-93-9	Class 6	>480 (H)	Class 6	>480 (H)
Zinc Bromide Saturated soln.	7699-45-8	Class 6	Not Tested	Class 6	>480 (H)

Contact 3M if you your chosen chemical does not appear in the table.

Data given here is: for information only; not certified product claims; based on one sample only; based on lab conditions; subject to change. Product supplied may show variation. Breakthrough times are not safe wear times. Permeation rates increase with temperature. Permeation testing does not assess: degradation; mechanical defects; product design/fit.

*PPE selection should be: based on risk assessment by a competent person; with knowledgeable of the working conditions; with knowledge of the limitations of PPE. Customers should contact a safety professional if in doubt.



For more information on all our products, call 3M Personal Safety Division on 0870 60 800 60 (UK) and 1800 320 500 (Ireland) or visit www.3M.co.uk/safety



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