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3M™ Protective Coverall 4540+

Technical Datasheet

Description

The 3M™ Protective Coverall 4540+ is designed to help protect against hazardous dusts (Type 5) and certain light liquid splashes (Type 6).

Comfort and Protection

Liquid Protection	Type 6 - Light Liquid Splashes (EN 13034:2005 + A1:2009)
Dust Protection	Type 5 - Solid Airborne Particulates (EN ISO 13982-1:2004 +A1:2010)
Anti-static	Anti-static coating on inner surface[1] (EN 1149-5:2008)
Nuclear	Radioactive particulates (EN 1073-2:2002) Class 1

⚠ Except EN863 puncture resistance and EN13274 resistance to injection. Does not offer protection against radiation.

[1] All apparel must be suitably grounded for anti-static treatment to be effective. White material only.

Approvals

These products are type examined by SATRA Technology Europe Ltd., Notified Body number 2777 and audited annually by SGS, Notified Body number 0598.

These products are CE marked to the requirements of European Regulation (EU) 2016/425.

The CE Certificate and Declaration of Conformity can be reviewed at www.3M.com/Body/certs

Materials	
Suit	Polypropylene and Polyethylene Laminate 55gsm (white)
Back Panel	SMMMS Polypropylene (blue)
Zipper	Nylon on Polyester Braid
Elastic	Synthetic Rubber (non-latex)
Cuffs	Polyester
Thread	Polyester/cotton

This product does not contain components made from silicone or natural rubber latex.



Sizing [2]

An appropriate size garment should be selected to allow sufficient movement for the task whilst maintaining a secure fit.

	Height		Chest	
S	64 – 67 in	164 – 170 cm	33 - 36 in	84 – 92 cm
M	66 – 69 in	167 – 176 cm	36 – 39 in	92 – 100 cm
L	69 – 71 in	174 – 181 cm	39 – 43 in	100 – 108 cm
XL	70 – 74 in	179 – 187 cm	43 – 45 in	108 – 115 cm
XXL	73 – 76 in	186 – 194 cm	45 – 49 in	115 – 124 cm
3XL	76 – 78 in	194 – 200 cm	49 – 52 in	124 – 132 cm
4XL	78 – 81 in	200 – 206 cm	52 – 55 in	132 – 140 cm

[2] The values above are the result of illustrative lab test measures and should not be considered as a commitment from 3M

Storage and disposal

- Store in dry, clean conditions in original packaging, away from direct sunlight, sources of high temperature, and solvent vapours
- Store within the temperature range -20°C to +25°C (-4°F to +77°F) and with relative humidity below 80%
- Expected shelf life is five (5) years from date of manufacture when stored as stated [3]
- Replace garments if damaged, heavily contaminated or in accordance with local work practice or regulations
- Handle and dispose of contaminated garments with care and in accordance with applicable regulations

[3]The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as a warranty.

Limited use


Do not wash


Do not dry clean


Do not bleach


Flammable — keep away from sparks or flames


Do not iron


Single use — do not re-use


Do not tumble dry

Warnings and limitations

Before use read and understand all user instructions and be sure that the product is suitable for the application and fitted correctly. Product must never be altered or modified.

Do not use for:

- Contact with heavy oils, sparks or flame, or combustible liquids;
- Environments with high mechanical risks (abrasions, tears, cuts);
- Contact with hazardous substances beyond Type 5/6 certification;
- Environments with conditions of excessive heat.

Applications and performance

Non-Hazardous Particulates	Yes	**Hazardous Liquid Splash**	Yes, if chemical is compatible with suit material[4]
Non-Hazardous Liquid Splash Particulates	Yes	**Hazardous Liquid Spray**	No
Hazardous Dusts and Fibres	Yes	**Organic Solvents**	No
Liquid Continuous Contact/Immersion	No	**Acids/ Alkalis**	Yes, if chemical is compatible with suit material[4]
Gases and Vapours	No		

[4] The chemicals against which the product has been tested and certified are listed in the user instructions and shown in the following table. For additional chemical penetration data, please call your local 3M Technical Service Representative or visit the 3M Chemical Test library on http://go.3M.com/CHTL

In all cases, a risk assessment should be carried out. Always read product user information. Use limitations and performance data should be considered to ascertain the protection required. If in doubt, contact a safety professional.

For more information on 3M products and services please contact 3M.

The table below shows the performance of this product when tested under laboratory conditions in accordance with the referenced standard test method.

Note: The maximum Class is 6 unless otherwise noted.

Test	Standard/test method	Class/result
Abrasion resistance (visual assessment)	EN 530:2010	Class 1
Flex cracking (visual assessment)	ISO 7854:1995	Class 6
Tear resistance	ISO 9073-4 :1997	Class 1
Tensile strength	EN ISO 13934-1:1999	Class 1
Puncture resistance	EN 863:1995	Class 1
Resistance to blocking	EN 25978:1990	No Blocking
Seam strength	EN ISO 13935-2:1999	Class 2

Test	Standard/test method	Class/result
Repellency to liquids – 30% H_2SO_4	EN ISO 6530:2005	Class 3 of 3
Liquid penetration resistance – 30% H_2SO_4	EN ISO 6530:2005	Class 3 of 3
Repellency to liquids – 10% NaOH	EN ISO 6530:2005	Class 3 of 3
Liquid penetration resistance – 10% NaOH	EN ISO 6530:2005	Class 3 of 3
Anti-static coating on inner surface (white material only)	EN 1149-1:2006	Pass
Radioactive particulates (TIL)	EN 1073-2:2002	Class 1 of 3

Visit the 3M Chemical Test Library for an online repository of available chemical data for 3M™ Protective Coveralls:

http://go.3M.com/CHTL

IMPORTANT NOTICE

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

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Version: J457673-2