

# 4540+ Technical Data Sheet







## 3M™ 4540+ Protective Coverall


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

### Key Features

- Innovative, soft and well draping laminated material offering good protection against dusts and certain light liquid splashes
- Elasticated waist and ankles for convenience and freedom of movement and knitted cuffs for extra comfort
- Three-panel hood design for better compatibility with complementary PPE
- Two-way zipper with sealable storm flap
- Low linting
- Reinforced gusset
- Breathable back panel for reduced heat stress and increased comfort

### Comfort and Protection

	<b>Liquid Protection</b>	Type 6 - Light Liquid Splashes (EN 13034:2005 + A1:2009)
	<b>Dust Protection</b>	Type 5 - Solid Airborne Particulates EN ISO 13982-1:2004
	<b>Anti-static</b>	Anti-static coating* on both sides (EN 1149-5:2008)
	<b>Nuclear</b>	Radioactive particulates (EN 1073-2:2002) Class 1

 Except EN863 puncture resistance. Does not offer protection against radiation.  
\* All apparel must be suitably grounded for anti-static treatment to be effective.

### Approvals

CE approved under PPE Directive (89/686/ECC), Category III  
Article 10 Certification: BTTG Testing & Certification Ltd.  
Notified Body Number: 0338  
Article 11B Supervision: SGS United Kingdom Ltd.  
Notified Body Number: 0120

### Materials

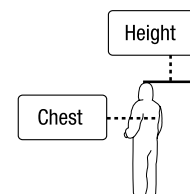
<b>Suit</b>	Polyethylene + Polyester / Polyethylene Laminate
<b>Back Panel</b>	SMMMS Polypropylene (blue)
<b>Zipper</b>	Metal / Nylon / Polyester Braid
<b>Elastic</b>	Neoprene Rubber
<b>Cuffs</b>	Polyester
<b>Thread</b>	Polyester / Cotton

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

### Sizing

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

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



### 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 +68°F) and with relative humidity below 80%
- Expected shelf life is three years from date of manufacture when stored as stated
- 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

### 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;
- Exposure situations resulting in spray or liquid build-up on the suit;
- 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

<b>Non-Hazardous Particulates</b>	Yes
<b>Hazardous Liquid Splash</b>	Yes if chemical is compatible with suit material†
<b>Non-Hazardous Liquid Splash</b>	Yes
<b>Hazardous Liquid Spray</b>	No
<b>Hazardous Dusts and Fibres</b>	Yes
<b>Organic Solvents</b>	No
<b>Liquid Continuous Contact/Immersion</b>	No
<b>Acids/Alkalis</b>	Yes if chemical is compatible with suit material†
<b>Gases and Vapours</b>	No

† The chemicals against which the product has been tested and certified are listed in the user instructions. For additional chemical penetration data, please call your local 3M Technical Service Representative.

Test	Standard/Test Method	Class/ Result
Abrasion resistance (visual assessment)	EN 530:1994	Class 1
Flex cracking (visual assessment)	ISO 7854:1995	Class 4
Tear resistance	ISO 9073-4:1997	Class 1
Tensile strength	ISO 13934-1:1999	Class 1
Puncture resistance	EN 863:1995	Class 1
Burst resistance	EN ISO 13938-2:1999	Class 1
Resistance to ignition	EN 13274-4:2001	Pass
Resistance to blocking	EN 25978:1990	No Blocking
Seam strength	EN ISO 13935-2:1999	Class 1
Repellency to liquids – 30% H <sub>2</sub> SO <sub>4</sub>	EN ISO 6530:2005	Class 3 of 3
Liquid penetration resistance – 30% H <sub>2</sub> SO <sub>4</sub>	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 both sides	EN 1149-1:2006	Pass
Radioactive particulates (TIL)	EN 1073-2:2002	Class 1 of 3

Typical applications may include: paint spraying, industrial clean-up and maintenance, industrial and chemical processing, asbestos inspection, building cleaning, insulation laying, pesticide handling/agriculture (particulate aerosols only), powder coating and pharmaceutical manufacturing. **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.**

The table left shows the performance of this product when tested under laboratory conditions. Please note that the tests may not reflect the reality of use and do not account for factors such as excessive heat and mechanical wear.

Note: The maximum Class is 6 unless otherwise noted.

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

### Important Notice

This guide is only an outline. It should not be used as the only means for selecting protective clothing. Before using any protective clothing, the wearer must read and understand the user instructions for each product. Specific country legislation must be observed. If in doubt, contact a safety professional. Selection of the most appropriate PPE will depend on the particular situation and should only be made by a competent person knowledgeable of the actual working conditions and the limitations of PPE.

Final determination as to the suitability of these products for a particular situation is the employer's responsibility. This information is subject to revision at any time. Always read and follow all User Instructions supplied with your 3M™ Protective Coveralls in order to ensure correct operation. If you have questions contact 3M Technical Service.

LIMITATION OF LIABILITY: Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential arising out of the sale, use or misuse of 3M OH&ESD products, or the user's inability to use such products.



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