# 4510 Technical Data Sheet



# 3M™ 4510 Protective Coverall

The 3M<sup>™</sup> Protective Coverall 4510 is designed to help protect against hazardous dusts (Type 5) and light liquid splashes (Type 6).

# **Key Features**

- · Helps provide basic protection against dusts and light liquid splashes
- Elasticated waist, ankles, and wrists for convenience and freedom of movement
- Two-way zipper with storm flap for convenience and additional protection
- Low-linting properties and anti-static treatment on both sides\*

#### **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
4.	Anti-static	Anti-static coating* on both sides (EN 1149-5:2008)
$\triangle$	Nuclear	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**

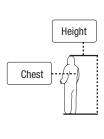
Suit	Polypropylene / Polyethylene Laminate Film		
Zipper	Nylon on Polyester Braid		
Elastic	Neoprene Rubber		
Thread	Polyester / Cotton		

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	
64 – 67 in	164 – 170 cm	33 – 36 in	84 – 92 cm
66 – 69 in	167 – 176 cm	36 – 39 in	92 – 100 cm
69 – 71 in	174 – 181 cm	39 – 43 in	100 – 108 cm
70 – 74 in	179 – 187 cm	43 – 45 in	108 – 115 cm
73 – 76 in	186 – 194 cm	45 – 49 in	115 – 124 cm
76 – 78 in	194 – 200 cm	49 – 52 in	124 – 132 cm
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.



4510

# **Applications and Performance**

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

Typical applications may include: asbestos inspection, coal dust in power plants, metal polishing, light-duty building cleaning, machine or vehicle maintenance, paint spraying, pharmaceutical, general industrial clean-up, insulation laying, woodworking, general powder handling and food processing. 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 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 (visual assessment)	EN 530:1994	Class 1
Flex cracking (visual assessment)	ISO 7854:1995	Class 5
Tear resistance	ISO 9073-4:1997	Class 1
Tensile strength	ISO 13934-1:1999	Class 1
Puncture resistance	EN 863:1995	Class1
Bursting resistance	ISO 13938-1:1999	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% $H_2SO_4$	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 both sides	EN 1149-1:2006	Pass
Radioactive particulates (TIL)	EN 1073-2:2002	Class 1 of 3

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<sup>TM</sup> 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, incidental, special or consequential arising out of the sale, use or misuse of 3M 0H&ESD products, or the user's inability to use such products.



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