# 3M<sup>™</sup> Protective Coverall 4520

#### Description

The  $3M^{\text{TM}}$  Protective Coverall 4520 is designed to help protect against certain light liquid splashes (Type 6) and hazardous dusts (Type 5).

The key features include:

- Breathable material to help reduce heat buildup and promote comfortable wear
- Elasticized waist, ankles, and wrists for convenience and freedom of movement
- Three panel hood design for compatibility with complementary PPE
- Two-way zipper with storm flap
- · Anti-static coating on both sides

#### **Materials**

- Suit: SMMMS Polypropylene, White
- Back panel: SMMMS Polypropylene, Green
- · Zipper: Nylon on Polyester Braid
- Elastic: Neoprene Rubber
- Thread: Polyester

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

#### **Approvals**

CE approved under PPE Directive (89/686/ECC), Category III Article 11B Supervision: SGS United Kingdom, LTD. Notified Body Number: 0120

### **Comfort and Protection**

	Liquid Protection	Type 6 (EN 13034). Whole suit reduced spray test (EN ISO 17491-4)* $\ensuremath{EN}$
	Dust Protection	Type 5 (EN ISO 13982-1). Inward Leakage results: $\rm L_{gm,8290}{<}30$ %; $\rm L_{S,8/10} < 15$ %. $\rm L_{S,8/10} < 15$ %.
4	Anti-static	Anti-static coating on both sides (EN 1149-1:2006/ EN 1149-5:2008)**
	Nuclear	Radioactive particulates (EN 1073-2:2002), Class 1***. Does not offer protection against radiation.

\* In the whole suit test, liquid spray is applied to the subject for 1 minute. During this time the subject moves gently and is rotated through 360°. A total of 1.88 liters is sprayed from four nozzles. The clothing is allowed to drain for 2 minutes and then the absorbent coverall is inspected for stains which are compared to a calibration stain. Requirement: Passes when the stained area inside is 3 times smaller than the calibration stain area.

\*\* All apparel must be grounded for anti-static treatment to be effective. Electrostatic propensity may decrease with wearing time and/or severe conditions.

\*\*\* Except puncture resistance

### **Applications and Performance**

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

\* For additional chemical penetration data, please contact your local 3M Technical Service Representative

## **Typical Applications**

Technical Data Sheet

Typical applications may include insulation installation, coal dust in power plants, woodworking, metal polishing, light-duty building cleaning, general powder handling, general industrial clean-up and maintenance, machine or vehicle maintenance and food processing.

In all cases a risk assessment should be carried out. Users must be trained and have read all *User Instructions*. Use limitations and performance data should be considered to ascertain the protection required. If in doubt, contact a safety professional.

### Performance

The table below 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.

Test	Standard	Result	Standard*	Class**/ Result
Abrasion	ASTM D4157 Cycles to Rupture	>3000	EN 530	Class 2
Flex Cracking			ISO 7854	Class 6
Tear Resistance Trapezoidal	Tear Strength ASTM D5733 (warp/fill)	4 lbf / 8 lbf	ISO 9073-4	Class 1
Tensile Strength	ASTM D751, Section 11, Procedure A (longitude/ traverse)	24 lbs / 15 lbs	ISO 13934-1	Class 1
Puncture Resistance	ASTM D2582 (MD/CD)	20N / 23N	EN 863	Class 1
Bursting Resistance	ASTM D751, Section 18	94N	ISO 13938-1	Class 2
Resistance to Ignition	CPSC 16 CFR PT 1610	Class 1	EN 13274-4	Pass
Seam Strength	ASTM D751, Section 66 (Peak Load/Seam Strength)	10 lbf / 5 lbf/in	EN ISO 13935-2	Class 3
Hydrostatic Resistance	ASTM D751, Procedure B	233 mm		
Repellency to Liquids*** – 30% $H_2SO_4$			EN ISO 6530	Class 3
Liquid Penetration Resistance*** – 30% $H_2SO_5$			EN ISO 6530	Class 3
Repellency to Liquids*** – 10% NaOH			EN ISO 6530	Class 3
Liquid Penetration Resistance*** – 10% NaOH			EN ISO 6530	Class 3
Anti-static Coating on Both Sides			EN 1149-1:2006/ EN 1149-5:2008	Pass
Radioactive Particulates			EN 1073-2	Class 1 of 3

\* The standards EN 13034:2005 and EN ISO 13982-1:2004, and EN 1073-2:2002 define performance classes

\*\* The maximum Class is 6 unless otherwise noted

\*\* The European Standard EN ISO 6530 measures liquid penetration through a fabric and liquid repellency by a fabric. The test simulates exposure to small amounts of chemicals (10 ml) for 1 minute duration only. The penetration index refers to the percentage of the original quantity which penetrates the fabric within 1 minute (in a detector beaker) as a percentage of the original quantity.



### **Use Limitations**

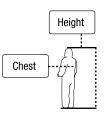
Do not use for:

- Contact with heavy oils, sparks or flames, or combustible liquids
- Exposure situations resulting in spray or liquid buildup on the suit
- Environments with high mechanical risks (abrasions, tears, cuts)
- Environments with exposure to hazardous substances beyond CE Type 5/6 certification
- Environments with conditions of excessive heat

# Sizing

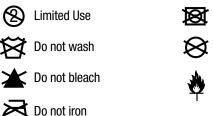
An appropriate size garment should be selected to allow sufficient movement for the task. Meets ANSI 101-1996 (R2008) sizing guidelines.

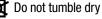
Height			Chest	
М	66 – 69 in	167 – 176 cm	36 – 39 in	92 – 100 cm
L	69 – 71 in	174 – 181 cm	39 – 43 in	100 – 108 cm
XL	70 – 74 in	179 – 187 cm	43 – 45 in	108 – 115 cm
XXL	73 – 76 in	186 – 194 cm	45 – 49 in	115 – 124 cm
3XL	76 – 78 in	194 – 200 cm	49 – 52 in	124 – 132 cm
4XL	78 – 81 in	200 – 206 cm	52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



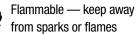
## **Storage and Disposal**

- Store in dry, clean conditions in original packaging
- Store away from direct sunlight, sources of high temperature, and solvent vapors
- Store within the temperature range -20°C to +25°C (-4°F to +68°F) and with relative humidity below 80%
- Shelf life is three years from date of manufacture when stored as stated above
- Replace garments if damaged, heavily contaminated or in accordance with local work practice
- Handle and dispose of contaminated garments with care and in accordance with national regulations





🕽 Do not dry-clean



Product must never be altered or modified.