Science. Applied to Life.™

3M[™] Protective Coverall 4535

Technical Data Sheet



Description

If you're looking for a balance of protection, durability and additional comfort, look no further than the 3M™ Protective Coverall 4535. Certified as CE Type 5/6 protection, it utilises a dual material design with added comfort features to optimise wearer acceptance.

Comfort & 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, white material only

(EN 1149-5:2008)1



Nuclear

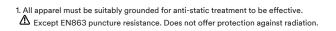
Radioactive particulates (EN 1073-2:2002) Class 1

Features & Benefits:

- Excellent barrier against dry particles and certain limited liquid chemical splash (CE Type 5/6)
- · Robust, super low-linting laminated microporous material
- Extra large breathable back panel for improved air circulation and reduced heat stress
- 2-way zipper with storm flap for added on-off convenience and extra protection
- Knitted cuffs with elasticated waist and ankles for increased comfort and freedom of movement
- Low-linting
- Anti-static treatment to EN 1149 to reduce charge build up
- Meets inward leakage requirements of EN 1073-2 for protection against nuclear particles

Standards

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





Materials

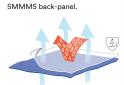
The following materials are used in the manufacture of this product.

Component	Material
Suit	Polypropylene + Polyethylene Laminate (55gsm white)
Back Panel	SMMMS Polypropylene (43gsm blue)
Zipper	Nylon on Polyester Braid
Elastic	Synthetic Rubber (non-latex)
Thread	Polyester/ Cotton

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

Fabric material

The front of the 3M protective coverall 4535 combines a high quality polyethylene laminate providing an excellent barrier, on top of a layer of soft, spunbond polypropylene fibres creating a robust, yet comfortable 55gsm protective fabric. The large blue back panel is made from 5 layers of spunbond and meltblown polypropylene giving excellent breathability, whilst maintaining the Type 5/6 level of protection.



Microporous laminate fabric.

Seam Technology

Seams are serged for Type 5/6 and certain seams bound for extra protection.



Sizing²

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

Size	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

^{2.} The values above are the result of illustrative lab test measures and should not be considered as a commitment from 3M.

Applications

Non-Hazardous Particulates	Yes
Non-Hazardous Liquid Splash	Yes
Hazardous Dusts and Fibres	Yes
Liquid Continuous Contact/ Immersion	No
Gases and Vapours	No
Hazardous Liquid Splash	Yes, if chemical is compatible with suit material ³
Hazardous Liquid Spray	No
Organic Solvents	No
Acids/ Alkalis	Yes, if chemical is compatible with suit material ³

^{3.} 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 $3M^{\mbox{\tiny M}}$ products and services please contact $3M^{\mbox{\tiny M}}.$

Performance

The tables show 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	Class/
lest	Method	Result
Abrasion resistance (visual assessment)	EN 530:2010	Class 1
Flex cracking (visual assessment)	ISO 7854:1995	Class 4
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 ignition	EN 13274-4:2001	Fail
Resistance to blocking	EN 25978:1990	No Blocking
Seam strength	EN ISO 13935-2:1999	Class 2
Repellency to liquids – 30% H ₂ SO ₄ Sulfuric Acid	EN ISO 6530:2005 Class 3 of 3	Class 3 of 3
Liquid penetration resistance – 30% H ₂ SO ₄ Sulfuric Acid	EN ISO 6530:2005	Class 3 of 3
Repellency to liquids – 10% NaOH Sodium Hydroxide	EN ISO 6530:2005	Class 3 of 3
Liquid penetration resistance – 10% NaOH Sodium Hydroxide	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

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 stated⁴
- 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

4. 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
- Environments with high mechanical risks (abrasions,
- Contact with hazardous substances beyond Type 5/6 certification:
- Environments with conditions of excessive heat.

Ordering Information

3M Code	Model #	Description
XA100006791	4535	Coverall White/Blue type 5/6 Size M
GT700001073	4535	Coverall White/Blue type 5/6 Size L
XA100006817	4535	Coverall White/Blue type 5/6 Size XL
GT700001099	4535	Coverall White/Blue type 5/6 Size XXL

Important Notice

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

