3M

3M 4530 Protective Coverall



Data Sheet

Description

The 3M[™] 4530 Protective Coverall is a **CE Category III**, **type 5 & 6** protective clothing.

The key features include:

- Excellent barrier against dry particles and liquid chemical splash (CE Type 5/6)
- Breathable material for reduced heat stress
- Knitted cuffs for increased wearer comfort
- · Elastic waist and ankles for convenience
- 2-Way Zip for extra-convenience
- Resealable zip flap for additional protection
- Limited Flame Retardancy (EN533 Index 1/0)
- Anti-static (both sides)
- Available in 4 sizes

Approvals

The 3M 4530 has been shown to meet the Basic Safety Requirements under Article 10 and 11B of the European Directive 89/686/EEC and is thus CE marked.

The product was examined at the design stage by: SGS, United Kingdom Ltd, Weston-Super-Mare, BS22 6WA, United Kingdom (Notified Body number 0120).

Applications

The 3M 4530 protective coverall is designed for uses where the wearer is likely to come into contact with limited hazardous light spray or splashes of liquid chemicals and/or dry particles (dusts).

Suggested uses are for protection against dusts, acid, alkali and/or solvent splash and water.

Typical applications include:

- Maintenance and repair
- Powder coating
- Paint Spray
- Insulation laying
- Pharmaceutical manufacture
- Wood processing
- Low level chemical handling
- Resin application
- Pressure / steam water cleaning
- Light spray of cleaning fluids
- Metal processing
- Welding when used over an appropriate fire retardant material (see use limitations).

Standards

The 3M 4530 meets the performance requirements of the following European standards:

prEN ISO13034: 1997: Limited protective performance Type 6: Against liquid chemicals (splashproof).

prEN ISO13982-1: 2000: Limited protective performance Type 5: Against hazardous dry particles (dustproof).

EN 1149-1: 1995: Electrostatic protection.

The 3M[™] 4530 is also retardant and meets the performance requirements of the European standard EN 533: 1997 index 1/0: Limited protection against flame and heat.

Use Limitations

Not for use in:

- Environments with high mechanical risks (abrasion, tear, cuts).
- Exposure to hazardous substances beyond CE Type 5/6 certification.
- Exposure situations resulting in directional spray or liquid build up on the suit (e.g showers of chemicals).
- Exposure to ionizing radiation.
- Contact with heavy oils.

Caution:

• Must be used over an index 2 or 3 fire retardant material for flame protection.

Materials

Suit: SMSBack panel: SMS

Elastic: Neoprene Rubber (Latex Free)Zipper: Nylon on Polyester braid

Knitted Cuffs: PolyesterThread: Polyester/Cotton

Performance of 3M Coverall Material

Physical Data	Test Method	Results	Class
Whole suit reduced spray test (type 6)	pr EN 13034 & EN468 (modified)	PASS	PASS
Whole suit inward leakage for fine particles (type 5)	pr EN ISO 13982-1	13.6 % (mean)	PASS
Abrasion resistance	EN 530 Method 2	N 530 Method 2 > 10 cycles	
Trapezoid Tear resistance	ISO 9073-4	> 40 N	Class 2
Seams strength	ISO 5082-A2	> 74 N	Class 3
Flex Cracking resistance	ISO 7854 Method B	> 100,000 cycles	Class 6
Puncture resistance	prEN 863	> 5 N	Class 1
Resistance to ignition	EN 1146	PASS	PASS
Anti Static	EN 1149-1	5,0 x10^10 Ω	PASS
Fire retardancy EN 533:1997		PASS	INDEX 1/0

Liquid Chemical Penetration

The European standard EN 368 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.

The repellency index refers to the amount of liquid collected after 1 minute (in a detector beaker) as a percentage of the original quantity.

Penetration Data 3M 4530	Test Method	Penetration Index	Repellency Index
Resistance to 30% Sulphuric Acid (H ₂ SO ₄)	EN 368	0%	98.4 %
Resistance to 10% Sodium Hydroxide (NaOH 10%)	EN 368	0%	98.4 %
Resistance to n-Heptane (Undiluted)	EN 368	31.8%	0 %
Resistance to Isopropanol	EN 368	28.1%	7.8 %

Sizing

An appropriate size should be selected to allow sufficient movement for the task.

	Н	L
M	167 - 176 cm	92 - 100 cm
L	174 - 181 cm	100 - 108 cm
XL	179 - 187 cm	108 - 115 cm
XXL	186 - 194 cm	115 - 124 cm



Maintenance, Storage & Disposal

Maintenance:

	Do not wash	\otimes	No Chlorination	>	Do not iron
Ø	Do not dry clean	Ø	Do not tumble dry		

Storage:

This product must be stored in a cool dry place, away from light.

Disposal:

This garment should be replaced when damaged or heavily contaminated.

Contaminated garment should be treated as special waste and disposed of in accordance with National regulations.

For more information on 3M products and services please call the 3M Health & Safety Helpline on: 0870 60 800 60



Occupational Health and Environmental Safety Group

3M United Kingdom PLC 3M Centre Cain Road, Bracknell Berkshire RG12 8HT Tel: 0870 60 800 60 www.3M.com/uk/safety 3M Ireland 3M House, Adelphi Centre Upper Georges Street Dun Laoghaire Co. Dublin, Ireland