

3M Personal Safety
Protective Coveralls



Built for
Protection
Designed for Comfort

The Power to Protect Your WorldSM



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Introduction

3M are proud to offer a new and extended portfolio of protective coveralls designed to provide protection against a range of potential skin hazards in the workplace. Through acquisition and innovation we have developed a strong portfolio of products.

3M Coveralls offer a variety of features, from breathable panels for increased comfort, to the use of fabrics with specialist treatments for added liquid repellency. 3M Safety Solutions Specialists can also work closely with you to help define your issues, identify problems and offer product solutions.

Also available as part of our protective coveralls offering is a range of accessories, including overboots and shoe covers, oversleeves and overhoods and a mop cap.

Take a look through our brochure for more information, or for further guidance you could:









- Call our Health & Safety Helpline on 0870 60 800 60 (UK) or 1 800 320 500 (Ireland).
- Visit our website @ www.3M.co.uk/coveralls
 - Whilst online you can check out our Safety Spotlights which focus on specific health and safety topics including skin hazards
 - Check out our series of online webinars which you can easily access from your PC!
- Follow us on twitter @3M_UK_Safety

Selection

There are many tests and standards that apply to protective coveralls and selection can be a daunting task. The following section will outline the different options available and help you to select the right product for your employees.

Protection Types








Protective coveralls can be designed for hazardous (approved to CE Category III) and non-hazardous (approved to CE Category I) applications. They are designed and tested for different types of hazards from particles to liquids to gases

Category	Protection Type	Products
CE Category III 	1. Gas Protection 	
	2. Non-Gas Protection 	
	3. Jet Protection 	3M 4570
	4. Spray Protection 	3M 4570, 3M 4565
	5. Particle Protection 	3M 4570, 3M 4565, 3M 4545, 3M 4540+, 3M 4535, 3M 4532+, 3M 4530, 3M 4520, 3M 4515, 3M 4510
	6. Limited Splash 	
CE Category I	CE Simple 	3M 4505, 3M 4500

PROTECTION

Additional Standards

Some 3M Protective Coveralls are also approved to additional standards* for specialist applications.

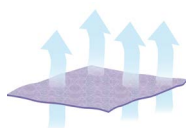
	Protection against nuclear particles
	Protection against nuclear particles with exception of EN863 puncture resistance
	Total Inward Leakage Class1
	Total Inward Leakage Class2
	Protection against micro-organisms
	Protection against micro-organisms with exception of ISO 16604
	Anti-static coating

# Tests for Protection against micro-organisms	4545	4565	4570
ISO 16603 - assesses resistances to penetration under pressure by synthetic blood (visual assessment)	Class 3	Class 6	Class 6
ISO 16604 - models resistance to viral penetration under pressure (biological assay)	Unclassified	Unclassified	Class 6
ISO 22610 - assesses resistances to wet bacterial penetration during mechanical contact	Class 6	Class 6	Class 6
ISO 22611 - determines resistance to penetration by aerosols containing bacteria	Class 3	Class 3	Class 3
ISO 22612 - assesses resistance to dry microbial penetration using talc contaminated with spores	Class 3	Class 3	Class 3

* Please refer to product user instructions and packaging for more information.

Materials

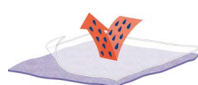
The following is a guide that offers a comparison between the materials used in the 3M™ Protective Coveralls. For full penetration and permeation data please contact our 3M Safety Solutions Specialists on 0870 60 800 60 (UK) or 1 800 320 500 (Ireland).



Polypropylene

Light duty protection against non-hazardous liquids and dust. Designed to offer a particularly good barrier against non-hazardous particles.

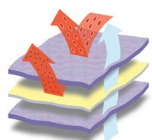
Products: 3M™ 4500 Protective Coverall



PE Laminate

Light duty protection against non-hazardous liquids and dust. Designed to offer a particularly good barrier against non-hazardous liquids.

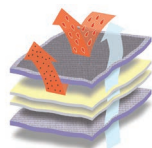
Products: 3M™ 4505 Protective Coverall



SMS

A breathable fabric that is designed to offer a barrier against hazardous particles and limited liquid splashes.

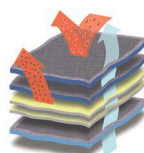
Products: 3M™ 4515 Protective Coverall



SMMS

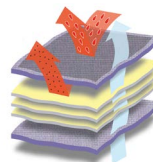
Breathable fabric that is designed to offer a good barrier to particles and limited liquid splashes.

Products: 3M™ 4530 Protective Coverall
SSMMS



Highly breathable fabric that is designed to offer a good barrier to particles and limited liquid splashes.

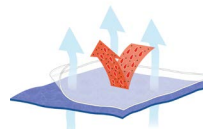
Products: 3M™ 4532+ Protective Coverall



SMMMS

Designed to offer increased breathability and a barrier against hazardous particles and limited liquid splashes.

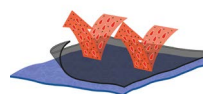
Products: 3M™ 4520 and the 3M™ 4535, and 3M™ 4540+ Protective Coverall back panels



Microporous PE Laminate

PE laminate is designed to offer a good barrier against hazardous particles and limited liquid splashes, whilst the micropores allow for some breathability.

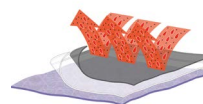
Products: 3M™ 4510, 3M™ 4535 (front of suit), 3M™ 4540+ (except back triangle) and 3M™ 4545 Protective Coveralls.



Non-microporous PE Laminate

Designed to offer a very good barrier against hazardous particles and certain liquid splashes and sprays.

Products: 3M™ 4565 Protective Coverall



Multi-layer non-microporous PE Laminate

Designed to offer an excellent barrier against hazardous particles and certain liquid splashes, sprays and jets.

Products: 3M™ 4570 Protective Coverall

Product features

3M Protective Coveralls can offer a variety of features depending on your needs. The diagram illustrates some of the features available.

3-Panel Hood

- Provides improved fit and increased compatibility with other Personal Protective Equipment (PPE)

Two-way zip

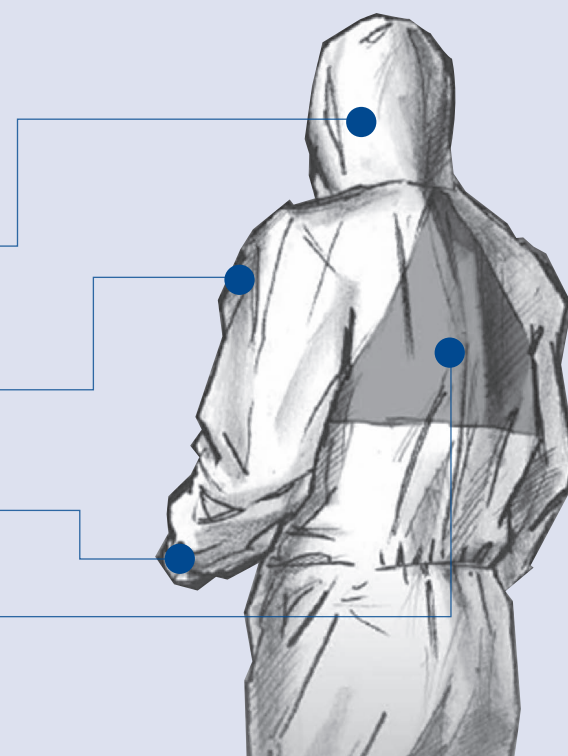
- With a fully sealable storm flap for extra convenience and protection from contaminants

Knitted cuffs

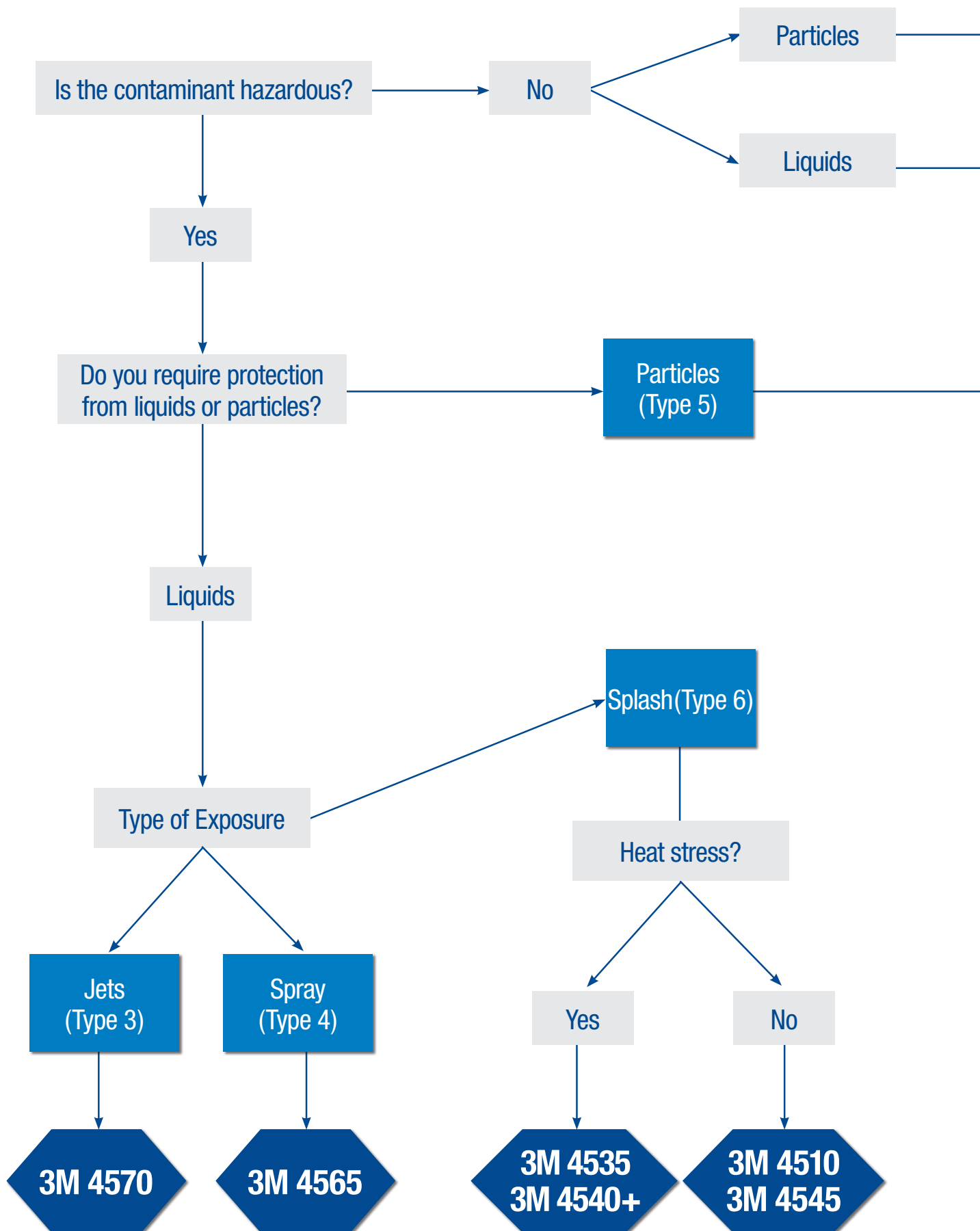
- For increased wearer comfort

Breathable back panels

- For added comfort in hot environments



Selection Flow Chart



3M 4500

3M 4505

WARNING: This product selector is intended to provide guidance on key features of the 3M product range. Product selection should always be made after a risk assessment by a competent person knowledgeable of the actual working conditions and limitations of the PPE.

Contact with sparks/flame?

Yes

3M 4530

No

Increased repellency to oil based liquids

Yes

3M 4532+

No

Taped seams?

No

Is low linting critical?

No

Anti-static required?

Yes

3M 4565

Yes

3M 4510
3M 4545

No

3M 4515

Yes

3M 4520

3M Protective Coveralls

3M™ 4500 Protective Coverall

The 3M 4500 is designed for light duty protection against non-hazardous liquids and dusts. It is designed to offer a particularly good barrier to particles.

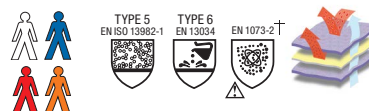
- Elasticated hood, cuffs, ankles and waist
- 1 way zip with storm flap



3M™ 4515 Protective Coverall

The 3M 4515 is available in a wide range of colours. The breathable fabric is designed to offer protection against hazardous dusts and limited liquid splash.

- Elasticated hood, cuffs, ankles and waist
- 2 way zip with storm flap
- Low linting



3M™ 4505 Protective Coverall

The 3M 4505 is designed for light duty protection against non-hazardous liquids and dusts. Its robust laminated material is designed to offer a particularly good barrier to liquids and oils.

- Elasticated hood, cuffs, ankles and waist
- 2 way zip with storm flap
- Water and oil resistant



3M™ 4520 Protective Coverall

The 3M 4520 is made from extremely lightweight and breathable material and is designed to offer protection against hazardous dusts and limited liquid splashes.

- Elasticated hood, ankles and waist
- 2 way zip with sealable tab on storm flap
- 3-panel hood
- Knitted cuffs
- Low linting



3M™ 4510 Protective Coverall

The 3M 4510 is designed to offer cost effective protection against hazardous dusts and limited liquid splashes.

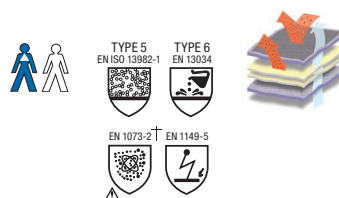
- Elasticated hood, ankles, cuffs and waist
- 2 way zip with storm flap
- Ultra low linting



3M™ 4530 Protective Coverall

The 3M 4530 is designed to be lightweight and breathable whilst offering protection against hazardous dusts and limited liquid splashes. The material complies with ISO 14116:2008 for limited flamespread index 1 (must be worn over an index 2 or 3 garment).

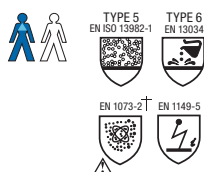
- Elasticated hood, ankles and waist
- 2 way zip with fully sealable storm flap
- 3-panel hood
- Knitted cuffs
- Low linting



3M™ 4532+ Protective Coverall

The 3M 4532+ is made from highly breathable fabric with a specialist coating, providing anti-static protection and enhanced liquid repellency.

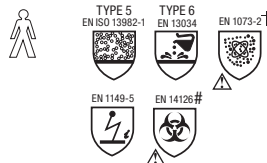
- Enhanced and reinforced triangular gusset panel
- Elasticated hood, ankles and waist
- 2 way zip with fully sealable storm flap
- 3-panel hood
- Knitted cuffs
- Low linting



3M™ 4545 Protective Coverall

The 3M 4545 is made from extremely soft, lightweight, yet durable fabric which provides a good barrier to hazardous particles and limited liquid splash. Supplied in vacuum packaging.

- Elasticated hood, ankles, and waist
- 2 way zip with fully sealable storm flap
- 3-panel hood
- Knitted cuffs
- Ultra low linting



3M™ 4535 Protective Coverall

The 3M 4535 provides a superb balance of comfort and protection. The microporous PE laminate at the front of the garment is designed to offer a good barrier to limited liquid splash, whilst the large SMMMS breathable back panel increases wearer comfort.

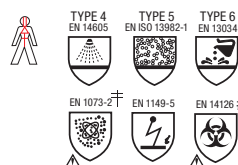
- Elasticated hood, ankles and waist
- 2 way zip with storm flap
- Knitted cuffs
- Low linting



3M™ 4565 Protective Coverall

The 3M 4565 is made from a soft lightweight fabric with taped seams, providing a very good barrier to hazardous particles and limited liquid splash and spray. Supplied in vacuum packaging.

- Elasticated hood, ankles and waist
- 3-panel hood
- 2 way zip with fully sealable storm flap
- Knitted cuffs
- Ultra low linting



3M™ 4540+ Protective Coverall

The 3M 4540+ is a highly versatile protective coverall which is mostly made from a unique microporous PE laminate, designed to be softer and drape better over the body. It is designed to offer an excellent barrier to particles and limited liquid splash but it also features a breathable SMMMS back panel.

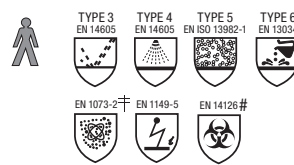
- Elasticated hood, ankles and waist
- 2 way zip with fully sealable storm flap
- 3-panel hood
- Knitted cuffs
- Low linting



3M™ 4570 Protective Coverall

The 3M 4570 is designed to offer an excellent barrier to hazardous particles and certain liquid splashes, sprays and jets.

- Elasticated hood and ankles
- 3-panel hood
- Double front closing system with large zip pull for easy wear
- Elasticated cuffs with thumb loops
- Ultra low linting



*†, ‡, # see page 4 for details

Accessories

Lab Coats

3M™ 4440 Lab Coat

- Microporous PE laminate material
- Knitted cuffs
- Offers a barrier against non-hazardous particles and light liquid splashes
- Zip fastener



3M™ 4430 Lab Coat

- SMMMS material
- Oil and alcohol resistant coating
- Offers a barrier against non-hazardous particles and light liquid splashes
- Zip fastener

3M™ 4400 Lab Coat

- Breathable, lightweight material
- Designed for light duty applications
- Offers a barrier against non-hazardous particles and light liquid splashes
- Zip fastener
- Available in white and blue



Overboot Covers

3M™ 450 Overboot



Reduced Slip Sole

- Made from PE laminate material
- Elastic at the calf
- Universal size with ties to help provide a good fit
- Reduced slip sole (450 only)

3M™ 440 Overboot



Standard Sole

Overshoe Covers

3M™ 442 Overshoe



- Laminated material offers a general barrier to non-hazardous substances
- Elastic at ankle
- Made from PE laminate material

3M™ 402 Overshoe



- Offers a general barrier to non-hazardous substances
- Reduced slip print on base
- Elastic at ankle

Oversleeves

3M™ 444 Oversleeve



- Offers a general barrier to non-hazardous substances
- 40.5cm / 16 inch protection covering wrist to top of arm
- Elastic finish on top end
- Knitted cuffs (445 only)
- Made from PE laminate material

3M™ 445 Oversleeve



Head Protection

3M™ 446 Overhood



- Laminated material offers a general barrier to non-hazardous substances
- Anti-static treated fabric
- Drapes over the shoulders offering excellent coverage

3M™ 407 Mob Cap



- Designed to help prevent hair from contaminating the working environment
- Universal size

N.B. 3M Accessories (excluding lab coats) are not CE marked and are not intended as PPE for use in hazardous environments.

Selection Guide by Application

Product Selector



	4540+	4500	4505	4510	4515	4520	4530	4532+	4535	4540+	4545	4565	4570
Certification**		CATEGORY I N/A	CATEGORY I N/A	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1149-5 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2†	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2† EN 14126#	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2† EN 14126#	CATEGORY III TYPE 6 EN 13034 TYPE 5 EN ISO 13982-1 EN 1073-2† EN 14126#
Material Weight		45gsm	67gsm	47gsm	50gsm	43gsm	54gsm	52gsm	55gsm	49gsm	49gsm	49gsm	92gsm
Sizes		S-4XL	S-4XL	S-4XL	S-4XL	S-4XL	M-2XL	S-4XL	S-3XL	S-4XL	S-4XL	S-4XL	S-4XL
Colours					 								

Light-duty cleaning, warehousing, janitorial	○	○		●									
Asbestos Inspection, site preparation, insulation			●	○	○	●	●	●	●	●	●	●	
Asbestos removal			●	●	●	●	●	●	●	●	●	○	
Light industrial cleaning, machine maintenance			○	●	●	○	○	○	○	○	○	●	
Pharmaceutical processing, handling toxic powders			●		●	●	●	●	●	●	●	○	
Painting & coating, resins			○			●	○	○	○	○	○	●	
Cleanrooms			●								○	○	
Pesticide spraying												○	●
Chemical mixing and handling												●	○
Chemical spills, decontamination, tank cleaning													○

○ Most popular choice ● Suitable for consideration

In all cases, a risk assessment should be carried out. Always read product user information. Use limitations and performance data should be considered by a competent person to ascertain the protection required. If in doubt, contact a safety professional.

** See page 4 or product technical datasheets for full details.

Customisation

We work in close partnership with you. Through regular contact and understanding your ambitions, goals and concerns we strive to successfully develop specific solutions that fully satisfy your requirements and ensure the best outcome for you. This may mean that an 'off the shelf solution' doesn't do the job. So contact one of our team of Safety Solutions Specialists today via our helpline to discuss your specific needs.



For more information on all our products, call 3M Personal Safety Division on **0870 60 800 60** (UK) and **1800 320 500** (Ireland) or visit www.3M.co.uk/safety



3M Personal Safety Division
3M United Kingdom plc
3M Centre
Cain Road, Bracknell
Berkshire RG12 8HT
Tel: 0870 60 800 60
www.3M.co.uk/safety

3M Ireland Limited
The Iveagh Building
The Park
Carrickmines
Dublin 18
Tel: 1 800 320 500

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