3M Safety Solutions – OH&ESD
3M™ Protective Coveralls Brochure

The Power to Protect Your World

Built for Protection
Designed for Comfort

The Power to Protect Your World™
## Contents

<table>
<thead>
<tr>
<th>Selection</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection Types</td>
<td>4</td>
</tr>
<tr>
<td>Additional Standards</td>
<td>4</td>
</tr>
<tr>
<td>Materials</td>
<td>5</td>
</tr>
<tr>
<td>Features</td>
<td>5</td>
</tr>
<tr>
<td>Selection Flow Chart</td>
<td>6</td>
</tr>
<tr>
<td>3M Protective Coveralls and Accessories</td>
<td>8</td>
</tr>
<tr>
<td>Selection Guide by Application</td>
<td>11</td>
</tr>
<tr>
<td>Customisation</td>
<td>12</td>
</tr>
</tbody>
</table>
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, lab coats and boxer short, vest and sock sets.

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
  - Keep an eye out for the latest 3M seminars and roadshows keeping you up to speed with our latest developments.
  - 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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Protection Type</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE Category III</td>
<td>1. Gas Protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Non-Gas Protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Jet Protection</td>
<td>3M 4570</td>
</tr>
<tr>
<td></td>
<td>4. Spray Protection</td>
<td>3M 4570, 3M 4565</td>
</tr>
<tr>
<td></td>
<td>5. Particle Protection</td>
<td>3M 4570, 3M 4565, 3M 4545, 3M 4540+</td>
</tr>
<tr>
<td></td>
<td>6. Limited Splash</td>
<td>3M 4535, 3M 4530+, 3M 4530, 3M 4520, 3M 4515, 3M 4510</td>
</tr>
<tr>
<td>CE Category I</td>
<td>CE Simple</td>
<td>3M 4505, 3M 4500</td>
</tr>
</tbody>
</table>

Additional Standards

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

- Protection against micro-organisms
- Protection against nuclear particles
- Anti-static

* 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

**SMMMS**
Designed to offer increased breathability and a barrier against hazardous particles and limited liquid splashes.
Products: 3M™ 4520, 3M™ 4530 Protective Coveralls 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

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**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
WARNING: This product selector is intended to provide guidance on key features of the 3M product range. The products shown highlight some of the products which may be considered but product suitability will depend on the particular situation and 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.
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™ 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™ 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™ 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™ 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™ 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™ 4530+ Protective Coverall
The 3M 4530+ provides breathable fabric and a specialist coating, offering alcohol and oil resistance. It is designed to offer protection against hazardous dusts and limited liquid splashes.
- Elasticated hood, ankles and waist
- 2 way zip with fully resealable storm flap
- 3-panel hood
- Knitted cuffs
- 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™ 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™ 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™ 4550 Protective Coverall
The 3M 4550 is designed to offer a very good barrier to hazardous particles and limited liquid splash and spray. It features taped seams and a soft, lightweight material. 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™ 4565 Protective Coverall
The 3M 4565 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

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

Available late 2012
## Accessories

### Lab Coats

<table>
<thead>
<tr>
<th>3M™ 4440 Lab Coat</th>
<th>3M™ 4430 Lab Coat</th>
<th>3M™ 4400 Lab Coat</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Microporous PE laminate material</td>
<td>• SMMMS material</td>
<td>• Breathable, lightweight material.</td>
</tr>
<tr>
<td>• Knitted cuffs</td>
<td>• Oil and alcohol resistant coating</td>
<td>• Designed for light duty applications</td>
</tr>
<tr>
<td>• Offers a barrier against non-hazardous particles and light liquid splashes</td>
<td>• Offers a barrier against non-hazardous particles and light liquid splashes</td>
<td>• Offers a barrier against non-hazardous particles and light liquid splashes</td>
</tr>
<tr>
<td>• Zip fastener</td>
<td>• Zip fastener</td>
<td>• Zip fastener</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Available in white and blue</td>
</tr>
</tbody>
</table>

### Overboot Covers

<table>
<thead>
<tr>
<th>3M™ 450 Overboot</th>
<th>3M™ 440 Overboot</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Made from PE laminate material</td>
<td>• Made from PE laminate material</td>
</tr>
<tr>
<td>• Elastic at the calf</td>
<td>• Elastic at the calf</td>
</tr>
<tr>
<td>• Universal size with ties to help provide a good fit</td>
<td>• Universal size with ties to help provide a good fit</td>
</tr>
<tr>
<td>• Reduced slip sole (450 only)</td>
<td>• Reduced slip sole (450 only)</td>
</tr>
</tbody>
</table>

### Overshoe Covers

<table>
<thead>
<tr>
<th>3M™ 442 Overshoe</th>
<th>3M™ 402 Overshoe</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Laminated material offers a general barrier to non-hazardous substances</td>
<td>• Offers a general barrier to non-hazardous substances</td>
</tr>
<tr>
<td>• Elastic at ankle</td>
<td>• Reduced slip print on base</td>
</tr>
<tr>
<td>• Made from PE laminate material</td>
<td>• Elastic at ankle</td>
</tr>
</tbody>
</table>

### Oversleeves

<table>
<thead>
<tr>
<th>3M™ 444 Oversleeve</th>
<th>3M™ 445 Oversleeve</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offers a general barrier to non-hazardous substances</td>
<td>• Offers a general barrier to non-hazardous substances</td>
</tr>
<tr>
<td>• 40.5cm /16 inch protection covering wrist to top of arm</td>
<td>• 40.5cm /16 inch protection covering wrist to top of arm</td>
</tr>
<tr>
<td>• Elastic finish on top end</td>
<td>• Elastic finish on top end</td>
</tr>
<tr>
<td>• Knitted cuffs (445 only)</td>
<td>• Knitted cuffs (445 only)</td>
</tr>
<tr>
<td>• Made from PE laminate material</td>
<td>• Made from PE laminate material</td>
</tr>
</tbody>
</table>

### Boxer shorts / vest set

<table>
<thead>
<tr>
<th>3M™ 408 Boxer short, Vest and Sock Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Elasticated waist (shorts)</td>
</tr>
<tr>
<td>• Intended to worn underneath other protective clothing</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Head Protection

<table>
<thead>
<tr>
<th>3M™ 446 Overhood</th>
<th>3M™ 407 Mob Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Laminated material offers a general barrier to non-hazardous substances</td>
<td>• Designed to help prevent hair from contaminating the working environment</td>
</tr>
<tr>
<td>• Anti-static treated fabric</td>
<td>• Elastic at ankle</td>
</tr>
<tr>
<td>• Drapes over the shoulders offering excellent coverage</td>
<td></td>
</tr>
</tbody>
</table>
## Product Selector

<table>
<thead>
<tr>
<th></th>
<th>4540+</th>
<th>4500</th>
<th>4505</th>
<th>4510</th>
<th>4515</th>
<th>4520</th>
<th>4530</th>
<th>4530+</th>
<th>4535</th>
<th>4540+</th>
<th>4545</th>
<th>4565</th>
<th>4570</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification**</td>
<td>CATEGORY I</td>
<td>CATEGORY I</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
<td>CATEGORY III</td>
</tr>
<tr>
<td>Material Weight</td>
<td>45gm</td>
<td>67gm</td>
<td>47gm</td>
<td>50gm</td>
<td>43gm</td>
<td>54gm</td>
<td>47gm</td>
<td>55gm</td>
<td>49gm</td>
<td>49gm</td>
<td>49gm</td>
<td>49gm</td>
<td>92gm</td>
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<tr>
<td>Colours</td>
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<td>![Icon]</td>
</tr>
</tbody>
</table>

- 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 user instructions or 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.

3M Health and Safety Helpline
0870 60 800 60 (UK) or
1 800 320 500 (Ireland)