



chemsplash®

# Jet Spray 88 Coverall Type 3B/4B/5B/6B

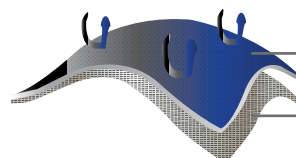
Style Code: **2727**

Style Code: **2617**

**Version available:  
WITH FEET  
(Anti-slip strips attached)**



The Chemsplash Jet Spray 88 Type 3B/4B/5B/6B Coverall is highly resistant against Chemical permeation. Made from a thick 88 GSM heavy weight Polypropylene / Polyethylene multilayer laminated material, it is also tested to provide protection against Biological Hazards to EN 14126, protecting against Viruses, Bacteria and Blood borne pathogens and also protects against Particulate Radioactive contamination (Class 1) to EN 1073-2.



Breathable  
Microporous Film

Non-Woven  
Polypropylene

## Features

- 88 GSM Heavyweight Microporous Non Woven Fabric
- Welded Taped Seams
- Self Adhesive Chin Strap for Optimum Protection
- Elasticated Hood, Half Waist, Cuffs and Ankles
- Convenient Thumb Loops at Wrist
- Single-Way Zip with Bi-Folding Self Adhesive Flap
- Silicone and Latex Free
- Non Linting Fabric & Anti-Static
- Does not contain: PFAS, RoHS, POP, TSCA or any Conflict Materials
- Complies with REACH Regulation (EC) 1907/2006 (+ SVHC list and Annex XVII)

## Suitable Applications

- Liquid Chemical Handling
- Contamination Control
- Medical
- Emergency Response
- Maintenance work at Nuclear Facilities
- Biological Protection

## Colours Available

|        |
|--------|
| Yellow |
|--------|

 Sterile Irradiated Version Available on Request

## Sizes in CMs

*in compliance with EN ISO 13688*

| Size | Height  | Chest   |
|------|---------|---------|
| S    | 160-165 | 89-93   |
| M    | 163-168 | 93-98   |
| L    | 167-172 | 101-106 |
| XL   | 173-178 | 108-114 |
| XXL  | 176-181 | 116-122 |
| XXXL | 185-190 | 124-130 |

EN 14605:  
2005+A1:2009



Type 3B

EN 14605:  
2005+A1:2009



Type 4B

EN ISO 13982-1:  
2004+A1:2010



Type 5B

EN 13034:  
2005+A1:2009



Type 6B

EN 1149-5:2018



Anti-static

EN1073-2:2003



Nuclear  
Particle  
Class 1

EN 14126:  
2003+AC:2004



Infective  
Agents

## Packaging Details



x 1 Unit



x 25 Units / Carton



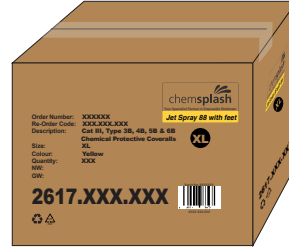
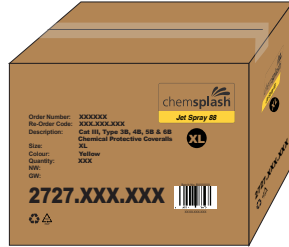
x 500 Units / Euro Pallet



x 700 Units / Standard Pallet

Code: **2727**

Code: **2617**  
with Feet Attached



Code: **2727**

| Style Code   | Size | Carton (LxWxH) cm | Carton Weight | Product Barcode | Carton Barcode | Commodity Code |
|--------------|------|-------------------|---------------|-----------------|----------------|----------------|
| 2727.700.004 | S    | 53 x 45 x 32      | 5.1 kgs       | 5391535466801   | 05391535466818 | 6210109800     |
| 2727.700.005 | M    | 53 x 45 x 32      | 5.4 kgs       | 5391535466825   | 05391535466832 | 6210109800     |
| 2727.700.006 | L    | 53 x 45 x 32      | 5.7 kgs       | 5391535466849   | 05391535466856 | 6210109800     |
| 2727.700.007 | XL   | 53 x 45 x 32      | 6.0 kgs       | 5391535466863   | 05391535466870 | 6210109800     |
| 2727.700.008 | 2XL  | 53 x 45 x 32      | 6.3 kgs       | 5391535466887   | 05391535466894 | 6210109800     |
| 2727.700.009 | 3XL  | 53 x 45 x 32      | 6.6 kgs       | 5391535466900   | 05391535466917 | 6210109800     |

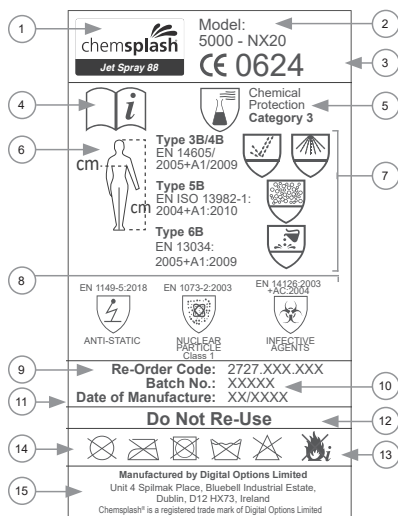
Code: **2617 With Feet**

| Style Code   | Size | Carton (LxWxH) cm | Carton Weight | Product Barcode | Carton Barcode | Commodity Code |
|--------------|------|-------------------|---------------|-----------------|----------------|----------------|
| 2617.700.004 | S    | 53 x 45 x 32      | 5.1 kgs       | 5391535469628   | 05391535469638 | 6210109800     |
| 2617.700.005 | M    | 53 x 45 x 32      | 5.4 kgs       | 5391535469642   | 05391535469659 | 6210109800     |
| 2617.700.006 | L    | 53 x 45 x 32      | 5.7 kgs       | 5391535469666   | 05391535469673 | 6210109800     |
| 2617.700.007 | XL   | 53 x 45 x 32      | 6.0 kgs       | 5391535469680   | 05391535469697 | 6210109800     |
| 2617.700.008 | 2XL  | 53 x 45 x 32      | 6.3 kgs       | 5391535469703   | 05391535469710 | 6210109800     |
| 2617.700.009 | 3XL  | 53 x 45 x 32      | 6.6 kgs       | 5391535469727   | 05391535469734 | 6210109800     |

| Performance of whole suit                                                                                                                                                       |                                                    |                                                                                                              |                                                                              |                                |       |                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------|-------|-----------------------|
| Test                                                                                                                                                                            | Requirement                                        | Result /Class/Conformity                                                                                     | Classification System                                                        |                                |       |                       |
| Jet test (type 3) EN ISO 17491-3                                                                                                                                                |                                                    | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Spray test (type 4) EN ISO 17491-4 – met. B                                                                                                                                     |                                                    | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Aerosol penetration (type 5)                                                                                                                                                    | $IL_{TIL} \leq 30\%$ , $TILS_{TIL} \leq 15\%$      | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Nominal protection factor (EN ISO 13982-2 – EN 1073-2)                                                                                                                          | $TIL_L \% 30$ , $TIL_L \% 20$ , Fpn 5              | Class 1                                                                                                      | Class 1 Low - 3 High                                                         |                                |       |                       |
| Seams tensile strength (EN ISO 13935-2) - 4017                                                                                                                                  | Class 4 > 75 N                                     | 4                                                                                                            | Class 1 Low - 6 High                                                         |                                |       |                       |
| Seams tensile strength (EN ISO 13935-2) - 4018                                                                                                                                  | Class 4 > 75 N                                     | 4                                                                                                            | Class 1 Low - 6 High                                                         |                                |       |                       |
| pH                                                                                                                                                                              | 6.3                                                | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Performance of fabric                                                                                                                                                           |                                                    |                                                                                                              |                                                                              |                                |       |                       |
| Test                                                                                                                                                                            | Requirement                                        | Result /Class/Conformity                                                                                     | Classification System                                                        |                                |       |                       |
| Resistance to penetration to liquid<br>(EN ISO 6530 – EN 13034)                                                                                                                 | Class 3: < 1%<br>Class 2: < 5%<br>Class 1: < 10%   | H <sub>2</sub> SO <sub>4</sub> 30%: class 3<br>NaOH 10%: class 3<br>o-xylene: class 3<br>Butan-1-ol: class 3 | Class 0 = no protection<br>Class 3 highest resistance<br>NC = Not Classified |                                |       |                       |
| Repellency to liquid<br>(EN ISO 6530 – EN 13034)                                                                                                                                | Class 3: > 95%<br>Class 2: > 90%<br>Class 1: > 80% | H <sub>2</sub> SO <sub>4</sub> 30%: class 3<br>NaOH 10%: class 3<br>o-xylene: class 3<br>Butan-1-ol: class 3 | Class 0 = no protection<br>Class 3 highest resistance<br>NC = Not Classified |                                |       |                       |
| Abrasion Resistance (EN 530 - method 2)                                                                                                                                         | Class 6: > 2000 cycles                             | Class 6                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Trapezoidal tear resistance (EN ISO 9073-4 – EN 1073-2)                                                                                                                         | Class 3: > 20 N                                    | Class 3                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Trapezoidal tear resistance (EN ISO 9073-4)                                                                                                                                     | Class 2 > 10 N                                     | Class 2                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Tensile strength (EN ISO 13934-1)                                                                                                                                               | Class 2 > 60 N                                     | Class 2                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Puncture resistance (EN 863)                                                                                                                                                    | Class 2 > 10 N                                     | Class 2                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Flex cracking resistance (EN 7854)                                                                                                                                              | Class 6: > 100 000 c.                              | Class 6                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Blocking resistance (EN 25978 - EN 1073-2)                                                                                                                                      |                                                    | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Permeation by liquids (EN ISO 6529 - EN 14605)                                                                                                                                  | >480 min                                           | H <sub>2</sub> SO <sub>4</sub> 50% Class 6                                                                   | Class 1 Low - 6 High                                                         |                                |       |                       |
| Electric surface resistance (ANSI/ESD STM 2.1:2013 – test condition EN 1149-1)                                                                                                  | < 1,3 x10 <sup>9</sup> Ω                           | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| EN 14126:2003+AC:2004                                                                                                                                                           |                                                    |                                                                                                              |                                                                              |                                |       |                       |
| Test                                                                                                                                                                            | Requirement                                        | Result /Class/Conformity                                                                                     | Classification System                                                        |                                |       |                       |
| Resistance to penetration by blood-borne pathogens - phi-x174 bacteriophage test - ISO 16603/16604                                                                              | Class 6: 20 kPa                                    | Class 6                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids - ISO 22610 (test microorganism: staphylococcus aureus) | Class 6: t > 75                                    | Class 6                                                                                                      | Class 1 Low - 6 High                                                         |                                |       |                       |
| Resistance to penetration by contaminated liquid aerosols - ISO DIS 22611 (test microorganism: staphylococcus aureus)                                                           | Class 3: log > 5                                   | Class 3                                                                                                      | Class 1 Low 3 High                                                           |                                |       |                       |
| Resistance to penetration by contaminated solid particles - EN ISO 22612 (test microorganism: spores of Bacillus subtilis)                                                      | Class 3: ≤ 1                                       | Class 3                                                                                                      | Class 1 Low 3 High                                                           |                                |       |                       |
| EN ISO 13688:2013+A1:2021                                                                                                                                                       |                                                    |                                                                                                              |                                                                              |                                |       |                       |
| Test                                                                                                                                                                            | Requirement                                        | Result /Class/Conformity                                                                                     | Classification System                                                        |                                |       |                       |
| pH (EN ISO 13688 – ISO 3071)                                                                                                                                                    | 3.5 < pH < 9.5                                     | Pass                                                                                                         | Pass / Fail                                                                  |                                |       |                       |
| Permeation Data                                                                                                                                                                 |                                                    |                                                                                                              |                                                                              |                                |       |                       |
| Tests performed according to ISO 6529: 2013 Method A                                                                                                                            |                                                    |                                                                                                              |                                                                              |                                |       |                       |
| Chemical                                                                                                                                                                        | Cas No                                             | PHY State                                                                                                    |                                                                              | Breakthrough Time at 150µg/cm2 | Class | Classification System |
| Phosphoric Acid 85%                                                                                                                                                             | 7664-38-2                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Hydrogen Peroxide                                                                                                                                                               | 124-43-6                                           | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Acetic Acid 10%                                                                                                                                                                 | 64-19-7                                            | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Ethylene Glycol                                                                                                                                                                 | 111-76-2                                           | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Sulphuric Acid 96%                                                                                                                                                              | 7664-93-9                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Sodium Hydroxide 50%                                                                                                                                                            | 1310-72-2                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Sodium Hypochlorite 10-15%                                                                                                                                                      | 7681-52-9                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Hydrochloric Acid 36%                                                                                                                                                           | 7647-01-0                                          | Liquid                                                                                                       | Fabric                                                                       | >114 minutes                   | 3     | Class 1 Low - 6 High  |
| Phenol 85% wt                                                                                                                                                                   | 108-95-2                                           | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Hydrofluoric acid aq 48 wt%                                                                                                                                                     | 7664-39-3                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Nitric Acid aq 70% wt                                                                                                                                                           | 7697-37-2                                          | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |
| Phosphonic Acid aq 81% wt                                                                                                                                                       | 13598-36-2                                         | Liquid                                                                                                       | Fabric                                                                       | >480 minutes                   | 6     | Class 1 Low - 6 High  |

Classification according to EN 14325:2018

## MORE CHEMICAL TESTS AVAILABLE UPON REQUEST



### Garment Inside Label Markings

- Model Name – Chemsplash Jet Spray 88
- Model Identification – 2727: Model 5000-NX20, 2617 with feet: 5000-NX20FT
- CE Marking – overall complies with requirements for category III personal protective equipment according to European legislation. Type-test & certification was issued by Centrocot Tessile Cottoniero, 21052 Busto Arsizi (VA), P.ZZA Sant'Anna, 2, Italy
- Indicates wearer should read the instructions for use
- Indicates compliance with European Standards for chemical protective clothing
- Sizing pictogram indicates to fit body measurements in sizes & correlation to letter code. Select the size to fit your body measurements
- Full body protection "types" achieved by this overall - defined by the European standards for chemical protective clothing:
  - EN 14605:2005 + A1:2009 (Type 3B & 4B)
  - EN ISO 13982-1:2004+A1:2010 (Type 5B)
  - EN 13034:2005+A1:2009 (Type 6B)
- Safety Standards:
  - Antistatic Protection (EN1149-5:2018)
  - Radioactive Contamination Protection (EN 1073-2:2003)
  - Protection Against Infective Agents (EN 14126:2003+AC:2004)
- Re-Order Code
- Batch Number
- Date of manufacture
- Do not re-use
- Flammable material – keep away from fire
- International care symbols:
  - ☒ Não limpar a seco ☒ Não limpar a seco ☒ Não secar à máquina ☒ Não lavar ☒ Não branquear
- Manufacturer's Name and Address

### Limitations

Exposition to certain chemicals or high concentrations may require higher barrier properties, either in terms of the performances of material or in the construction of the suit. Such areas can be protected by garments in type 1 to type 2. The user shall be the sole judge of the suitability for the type of protection required and the corrected combinations of coveralls and additional equipment.

### Warnings

- Do not use if any defects are noticed (e.g. seam defects, faulty zip)
- Select the correct garment size
- Dressing correctly with a closed zip protected by the flap
- If necessary use additional devices with same characteristics (such as gloves, breathing apparatus, boots etc.) in order to provide for full body protection
- Coverall meets Ljmm, 82/90 ≤ 30% - Ls 8/10 ≤ 15%
- Wear for long periods of time can cause heat stress
- Heat stress and discomfort can be reduced or eliminated by using appropriate undergarments or suitable ventilation equipment
- In case of airborne solid particulates it is advisable to cover the zipper and to surround the extremity of the sleeves and the leggings with adhesive ribbon
- Coverallers are for single use only and must be disposed after any job
- If any breaking, punctures etc. occur, leave the working area and wear new coverall
- The person wearing the electrostatic dissipative protective clothing shall be properly earthed. The resistance between the person and the earth shall be less than 10<sup>8</sup> Ω e.g. by wearing adequate footwear
- Electrostatic dissipative protective clothing shall not be open or removed whilst in presence of flammable or explosive atmospheres or while handling flammable or explosive substances
- Electrostatic dissipative protective clothing shall not be used in oxygen enriched atmospheres without prior approval of responsible safety engineer

### How to wear protective clothing

Remove the coveralls from its packaging, open the central zipper and wear. Fully close the zipper. In case of airborne solid particulates risk it is advisable to tape the zipper and protective gloves, tape the extremity of the sleeves and the leggings with adhesive ribbon, making sure that the sleeve

covers the glove opening.

### Storage and disposal

Garments must be stored in their original packaging in a dark, dry and cool place. Ideally at temperatures between -5 and 40 degrees centigrade.

Garments should be disposed of without harm to the environment. Restrictions to disposal may result from contamination during use. In this case please dispose of in compliance with applicable laws and regulations.

### Donning and doffing

Take the coverall out of its bag and give it a good shake to loosen it out. Remove your footwear. Lower the zip on the coverall so that both stoppers are at the bottom of the zip. Pull the coverall on, legs first. Pull it up over your arms and shoulders. Do not zip it up. Do a squat or sit action to expel any air from the suit. Zip the coverall up to the desired length using the top stopper only and then lock the stopper in place by clicking it downwards into the zip. Firmly press down the adhesive tape then remove the strip, and make sure the sticky part is left behind. Now press the adhesive flap over the zip and close the flap. Replace your footwear.

### Shelf-life

Chemsplash Cat 111-Type 3, 4, 5 & 6 Coveralls and related Partial Body accessories are generally constructed from inert polymers that are not materially impacted by normal storage conditions. In unopened bags and cartons and in such conditions (-5°C to 40° C, dry and away from direct light) the expected shelf life can be approximately 10 years. Some discoloration of fabrics may occur over time, but this usually results from seepage of dyes and does not impact fabric performance. On occasion particular properties of some fabrics may alter over time. In particular anti-static properties result from a topical treatment which will degrade over time and in use. It is crucial that all garments, regardless of age, but especially after a longer shelf life, are thoroughly checked for degradation or wear before use. Do not use any garment that appears inferior. It is always the end user's responsibility to ensure any garment is fit for purpose.

Declaration of Conformity available at:  
www.chemsplash.com

CE guarantees the free circulation of products and goods within the European Union. CE-Marked product complies with the essential requirements of the European Regulation (EU) 2016/425.