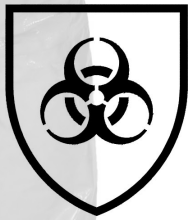
RESPIREX™

Limited Life
SC4 Coverall Splash Suit
Instructions for use

Type 3

EN14605:2005+A1:2009



Type 3-B

EN14126:2003

Contents

General Information

The Respirex limited use SC4 coverall splash suit is a one-piece chemical protection suit that conforms to the following European standards:

- EN 14605:2005+A1:2009 Type3 (Protective clothing against liquid chemicals - clothing with liquid-tight connections)
- EN 14126:2003 Type 3-B (Protective clothing against infective agents)

The European standards above specify the performance requirements for the materials of construction (e.g. abrasion resistance, tear resistance etc.), and for the suit as a whole (e.g. resistance to penetration by liquids). The suit is CE marked to indicate compliance with the basic safety requirements under Module B of the Regulation (EU) 2016/425 personal protective equipment (PPE).

Respirex Limited Life SC4 coverall splash suits are manufactured from a high performance barrier laminate material, engineered for use in chemical protective clothing. The combination of the barrier laminate and the polymer provide a particle-tight material with good resistance to penetration and permeation by many liquids and gases.

The barrier laminate, offers protection in a wide range of applications including:

- Chemical handling
- Hazardous waste clean-up
- Military applications
- Disease and disaster management
- Emergency response services, spill clean-up and accident interventions

Typical garment features include:

- A large semi-rigid visor bonded to the suit that provides the wearer with an excellent field of vision
- A 117cm (46") Nylon tooth zip fitted to the rear of the garment with an overflap sealed by either Velcro or self-adhesive tape
- Integral bootees (sock like extension of the suit leg that encapsulates the entire foot) intended to be worn inside separate (i.e. not attached) protective safety boots that provide protection against mechanical risks.
- Outer legs (splash guards) intended to prevent liquid entering the safety boots
- Glove option Kemblok™ or KCL Butoject 898 gloves complying with EN374-1, EN374-5, EN388 & EN420 permanently bonded to the suit (for data specific to either glove option please refer to the supplied user information).
- An exhalation valve fitted to the rear of the suit which automatically releases any excess pressure which builds up inside the garment during use.

To comply with the requirements of EN 14605:2005+A1:2009 and EN 14126:2003 the suit MUST be worn in combination with self contained compressed air breathing apparatus (SCBA) conforming to EN 137 and a full facemask conforming to EN 136. Please contact Respirex to verify the suitability of the face mask intended for use with the Limited Life SC4 coverall splash suit.

Warnings & Limitations

- Before selecting appropriate protective clothing a detailed assessment of the nature of the hazard and the working environment should be undertaken. There are different factors such as concentration, temperature, pressure and other environmental influences that have significant influence on the barrier properties of Limited Life SC4 coverall splash suits.
- Only for use by trained competent personnel.
- Exposure to certain very fine particles, intensive liquid sprays and splashes of hazardous substances may require protective clothing of higher mechanical strength and barrier properties than those offered by the Limited Life SC4 coverall splash suit.
- The suit is designed for single use only, Respirex cannot guarantee the integrity or performance characteristics of a suit that has seen multiple cycles of usage.
- Limited Life SC4 coverall splash suits should not be used in environments where there is a high risk of puncture occurring.

- If the suit is heavily contaminated or mechanically damaged in any way it MUST NOT be used and MUST be disposed of.
- Never modify or alter this product.
- Please ensure that you have chosen suitable PPE for your application. The user shall be the sole judge for the correct combination of full body protective coverall and ancillary equipment (gloves, boots, respiratory equipment etc) and how long a Limited Life SC4 coverall splash suit can be worn on a specific application with respect to its protective performance, wear comfort or heat stress.
- It has not been possible to test for permeation according to ISO 6529, the seam attaching the KCL Butoject 898 gloves to the suit due to the dimensions of the permeation test cell and the cuff ring. However, the attachment conforms to EN ISO 17491-3 and the permeation performance of the suit material and glove can found on page 10 of this document.
- Materials that may come into contact with the wearer's skin are not known to release substances that are toxic, carcinogenic, mutagenic, allergenic, toxic to reproduction or otherwise harmful to the majority of individuals. These products contain no components made from natural rubber latex
- Continuous contact with certain chemicals can adversely effect the field of vision and protection offered by the visor. If the end-user notices any discolouration of the visor the suit should be withdrawn from use.
- The suit does not provide protection against heat or flame, it should therefore not be worn in potentially flammable or explosive environments.

For any enquiries please contact the Respirex customer services department on

Tel : +44 (0)1737 778600 or Fax : +44 (0)1737 779441.

Storage

Suits must always be stored in a clean and dry condition at ambient temperature, and if being stored for long periods of time, out of direct sunlight.

Before stowing the suit, check :-

1. The suit for damage.
2. The suit is completely dry, paying particular attention to the gloves.

The suit should be stored in a plastic bag with NO heavy weight placed on top. To fold the garment :-

1. Fasten the zip halfway.
2. Lay the suit face down on a clean flat surface.
3. Lift the BA pod and fold in on itself.
4. Fold the sleeves in, cuffs upwards.
5. Fold the legs in half lengthways.
6. Fold the legs upwards a quarter of their length.
7. Fold the legs again towards the waist of the suit.
8. Fold the hood back with the visor on top of the suit.
9. Place the folded suit in a suitable plastic bag.

DO NOT fold or crease the visor, this will help to keep its natural shape.

Pre-checks

1. Visually inspect the suit for any damage that may impair the correct working of the garment together with the gloves.
2. The suit is free from contamination both inside and out.

3. The zip operates correctly and the slider is in good condition.
4. The suit materials are free from tears and holes. Pay particular attention to the seam areas.

Dressing Procedure

It is good practice for an assistant to help the wearer don and doff the suit. This makes the process easier and quicker, and will help the wearer to avoid stumbling or tripping which may result in personal injury or damage to the suit.

Follow these steps in donning the suit:

1. Unfasten the zipper by pulling the slider approximately 61cm (24") at a time, keeping the zip straight with one hand as you pull the slider with the other. Repeat this exercise for the whole length of the zip. FAILURE TO FOLLOW THIS PROCEDURE MAY RESULT IN THE ZIP BECOMING JAMMED. NOTE: care should be taken where zip flaps are stitched across the top; excessive stress at this point may cause the suit to tear.
2. Remove all personal affects which may result in damage to the suit (e.g. pens, badges, jewellery etc.).
3. Remove shoes or boots. The integral bootees are not designed to accommodate footwear.
4. Tuck trousers into socks to make donning of suit legs and bootees easier.
5. While seated, place both legs into the suit then fold the outer legs (splash guards) upwards.
6. Don safety boots. It is strongly recommended that you wear a larger size of boot than normal (ideally at least one size larger), not only to accommodate the surplus fabric of the integral bootee, but also to ease in the donning process.
7. Carefully fold down the outer legs of the suit over the exterior of the safety boots. Once folded down it is important to ensure that the seam where the outer leg joins the suit is flat and does not form a 'channel' where liquid could collect. Liquid will not be able to enter the boots once the outer leg is fully folded down.
8. With the assistance of the dressing assistant the wearer should now don a breathing apparatus set (SCBA) in accordance with manufacturer's instructions. At this stage the SCBA should not be started and the face mask should be left hanging on its strap around the wearer's neck. The wearer should now carry out all necessary pre-checks.
9. Next, the SCBA cylinder should be switched on in accordance with manufacturer's instructions and the face mask donned by the wearer. The dressing assistant can help the wearer to adjust the head straps of the face mask until comfortable. If necessary the wearer can now also don a firefighters safety helmet.
10. The wearer should stand up and cross arms over the chest whilst the dressing assistant lifts the suit up and over the head and breathing apparatus set.
11. The dressing assistant should fasten the zipper carefully following the reverse of the procedure outlined in stage 1 and seal down any outer flaps. If a Velcro over flap is fitted ensure that both halves of the Velcro are firmly and evenly joined together, leaving no gaps or ridges for possible fluid ingress. If an over flap with self-adhesive tape is fitted simply peel away the backing strip from the tape and carefully press down onto the suit, once again ensuring there are no gaps or ridges for fluid ingress. IMPORTANT: To comply with the requirements of EN14605:2005+A1:2009 the outer flaps must be sealed using a suitable liquid impermeable tape.
12. The wearer should place both arms into the sleeves until the hands are placed comfortably into the attached Kemblok™ laminate gloves (it is recommended that cotton gloves are worn inside the laminate gloves attached to the suit). In order to provide extra mechanical protection to the integral Kemblok™ gloves an additional pair of outer polymer outer gloves should be worn.

Decontamination for removal of suit

Because the SC4 coverall splash suit is designed primarily as a single use garment, the end-user shall be the sole judge for how long it can be worn on a specific task and whether or not it can be adequately cleaned or decontaminated.

Preliminary washing by means of a high pressure shower will remove most of the contaminant from the outer surfaces of the suit sufficient to allow the wearer to undress from the garment.

Should you not have access to a high pressure shower, the suit can be sprayed with copious quantities of water and a suitable detergent and neutralizer for a minimum period of 5 minutes.

The outer surfaces of the suit should be cleaned using a diluted solution of Citrikleen (5 to 20 parts water to 1 part Citrikleen) applied using a soft cloth or soft brush if necessary. NEVER use a washing machine, spin or tumble drier. The inner surfaces of the suit should not be cleaned.

Remove all excess water and allow the suit to dry naturally before disposal.

Undressing Procedure

It is essential that the suit is decontaminated sufficiently to safely remove the wearer from the garment. It will be necessary for the dressing assistant to aid the wearer to remove the suit (it is essential that the dressing assistant wears suitable protective clothing).

1. The dressing assistant should break the seal on the flap at the rear of the suit and unfasten the zipper.
2. Carefully fold the suit over the wearer's head and off the SCBA set (following the reverse of the procedure outlined in the dressing instructions), keeping the outer surface of the suit away from the wearer at all times.
3. As the dressing assistant pulls the suit forward the wearer's arms should be withdrawn from the sleeves and safety gloves (this step may turn the sleeves of the suit inside out).
4. The dressing assistant should fold the suit down to the top of the boots so that the wearer can step out of the suit.
5. Finally remove the wearer's face mask and shut down the SCBA cylinder according to the manufacturer's instructions. With the assistance of the dresser the SCBA set can now be removed in the usual way.

Note: Extreme care should always be taken when handling contaminated suits

Cleaning & Maintenance Accessories

The outer surface of the suit can be cleaned with Citrikleen, Part No. F00938.

The visor can be cleaned with Respirex 'Fog-Off', Part No. F00934.

Clean & lubricate zips with Aquaseal® Zipcare, Part No. F00147.

All these accessories are available from Respirex. Please contact our Customer Services Department on Tel : +44 (0)1737 778600.

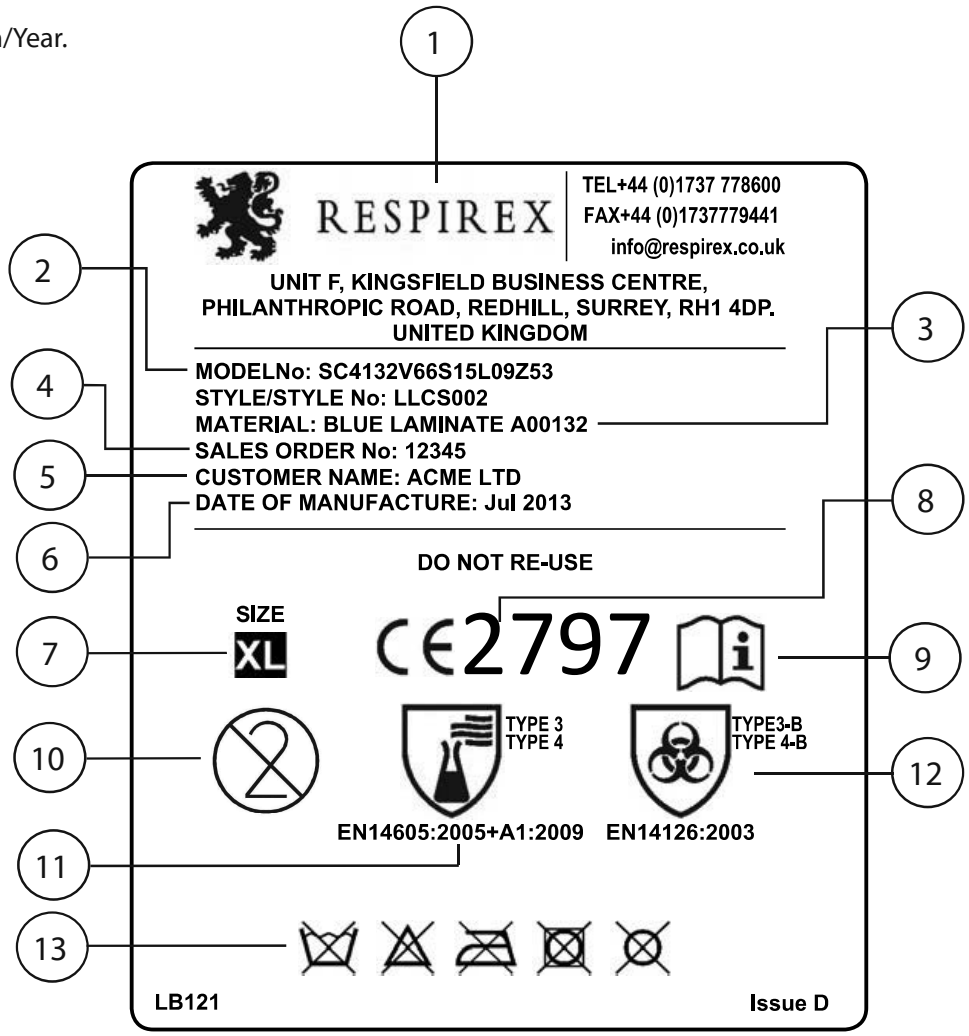
Disposal

Uncontaminated SC4 coverall splash suits may be incinerated. Contaminated garments should be handled as contaminated waste in accordance with local and national regulations.

Product labelling

1. Manufacturer of garment;
   Respirex International Ltd.
2. Manufacturer's Model number
3. Material of Manufacture.
4. Manufacturer's Order No.
5. Customer Name.
6. Date of manufacture; Day/Month/Year.
7. Garment Size

Size	Chest (cms)
S	88-96
M	96-104
L	104-112
XL	112-124
XXL	124-136



8. CE Mark and notified Body code.
9. "Open Book Pictogram"; wearer must refer to the "Instructions for use" for further information.
10. Single Use Only
11. Protection against liquid chemicals
12. Protection against biological hazard
13. Five care pictograms indicating that clothing is not suitable for cleaning and reuse.
    - Pictogram 1 Do not wash
    - Pictogram 2 Do not bleach
    - Pictogram 3 Do not iron
    - Pictogram 4 Do not machine dry
    - Pictogram 5 Do not dry clean

Chemical Permeation Testing At Respirex

Permeation is the process by which a chemical moves through protective clothing material on a molecular level. At its headquarters in Surrey, UK, Respirex operate a chemical permeation testing laboratory equipped with the latest technology. All testing is carried out by fully qualified chemists who are able to test Respirex's own materials against a wide range of chemical substances. In this way the customer can be advised and recommended the most suitable material to use against any challenging chemical encountered in the workplace.

Permeation tests can be carried out in accordance with EN374-3, EN ISO 6529 and ASTM 739. The clothing material is exposed to the challenging chemical in a permeation cell so that breakthrough times and permeation rates can be measured. Breakthrough time is the time taken for the chemical to permeate through the material after continuous contact with the outer surface of a chemical safety suit. Permeation rates, measured in µg (min.cm^2), are an indication of the amount of chemical reaching the wearer inside the suit after breakthrough occurs.

For advice on chemical permeation or decontamination contact the Respirex laboratory on Tel :+44 (0)1737 778600, Fax :+44 (0) 1737 779441 or Email: laboratory@respirex.co.uk, where our qualified staff will be happy to help you. Outside of normal working hours (9.00am-5.00pm Mon-Fri) please leave details of your enquiry on the answerphone service so that the laboratory staff can deal with your query with the minimum of delay.

Material Performance Data

Unless otherwise stated, all data shown indicates performance characteristics of the barrier laminate material in accordance with the requirements of EN14605:2005+A1:2009 and EN 14126:2003, plus additional standards.

Resistance to permeation by chemicals

Tests carried out under laboratory conditions by independent accredited laboratories in accordance with EN374-3 or EN ISO 6529. Table shows average breakthrough times in minutes.

Chemical	Result Barrier laminate material and seam	Result Kemblok™ Glove	Result KCL Butoject 898 Glove	Visor*	EN Class*
Sodium Hydroxide 40%	> 480 mins	> 480 mins	> 480 mins	> 480 mins	6 of 6

Respirex's in-house laboratory can provide permeation data against other chemicals as required. * EN class specified by EN 14325:2004, the higher the class number the better the performance.

Repellency to liquid chemicals

Tests carried out under laboratory conditions by independent accredited laboratories in accordance with EN ISO 6530.

Chemical	Repellency index	EN Class*
Sulphuric acid 30%	> 95%	3 of 3
Sodium Hydroxide 10%	> 95%	3 of 3
o-Xylene 99.9%	> 95%	2 of 3
Butan-1-ol 99.9%	> 90%	2 of 3

* EN class specified by EN 14325:2004, the higher the class number the better the performance.

Resistance to penetration by liquid chemicals

Tests carried out under laboratory conditions by independent accredited laboratories in accordance with EN ISO 6530.

Chemical	Penetration index	EN Class*
Sulphuric acid 30%	< 1%	3 of 3
Sodium Hydroxide 10%	< 1%	3 of 3
o-Xylene 99.9%	< 1%	3 of 3
Butan-1-ol 99.9%	< 1%	3 of 3

* EN class specified by EN 14325:2004, the higher the class number the better the performance.

Protection against infective agents

Tests carried out under laboratory conditions by independent accredited laboratories.

Test Method	Property	EN Class*
ISO 16603	Resistance to penetration by synthetic blood	6 of 6
ISO 16604	Resistance to penetration by blood-borne pathogens	6 of 6
ISO/DIS 22611	Resistance to penetration by biologically contaminated aerosols	3 of 3
EN ISO 22612	Resistance to dry microbial penetration	3 of 3
EN ISO 22610	Resistance to wet microbial penetration	6 of 6

*EN class specified by EN 14126:2003, the higher the class number the better the performance.

Physical Properties

Tests carried out under laboratory conditions by independent accredited laboratories.

Test Method	Property	EN Class*
EN 530 Meth 2	Abrasion resistance	6 of 6
EN ISO 7854 Meth B	Flex cracking resistance	1 of 6
EN ISO 9073-4	Trapezoidal tear resistance	4 of 6
EN ISO 13934-1	Tensile strength	3 of 6
EN 863	Puncture resistance	2 of 6
EN 13274-4 Meth 3	Resistance to ignition	Pass

* EN class specified by EN 14325:2004, the higher the class number the better the performance.

Whole Suit Performance

Tests carried out under laboratory conditions by independent accredited laboratories.

Type 3 Liquid jet test (taping for nylon zip and open sleeves must be taped to gloves)	EN 14605:2005+A1:2009	Pass
Type 4 Liquid spray test (taping for nylon zip and open sleeves must be taped to gloves)	EN 14605:2005+A1:2009	Pass
Seam strength	EN ISO 13935-2:1999	Class 4*

* EN class specified by EN 14325:2004, the higher the class number the better the performance.

Risk Assessment

The summary of the risks taken into account in the design of the limited use one-piece chemical protective coveralls.

EN 14605: 2005 +A1:2009

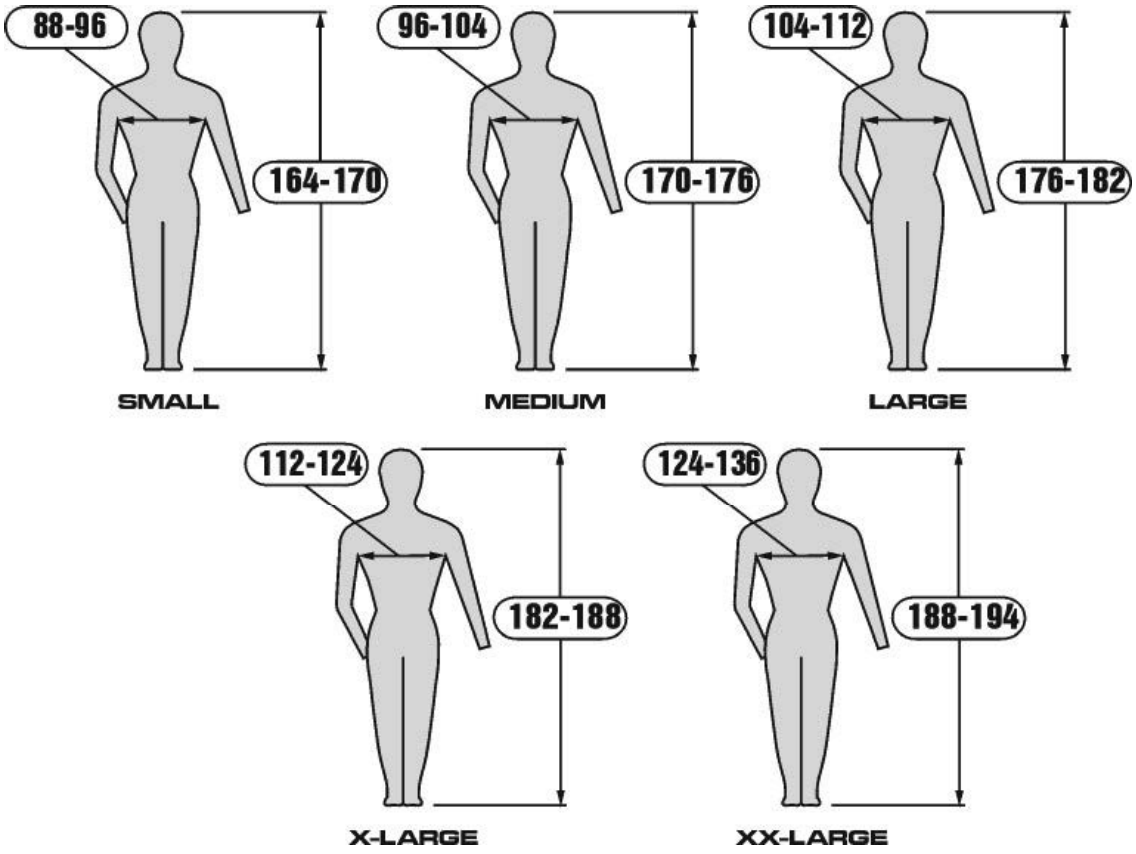
- Full-body protective clothing with liquid-tight connections between different parts of the clothing (Type 3: liquid-tight clothing) and with liquid-tight connections to component parts, such as hoods, gloves, boots, visors or respiratory protective equipment, which may be specified in other European Standards.
- Full-body protective clothing with spray-tight connections between different parts of the clothing (Type 4: spray-tight clothing) and spray-tight connections to component parts, such as hoods, gloves, boots, visors or respiratory protective equipment, which may be specified in other European Standards.
- Partial body protection garments offering protection to specific parts of the body against permeation of chemical liquids. Partial body protection only protects the localised parts of the body that are covered by relevant PPE.

EN 14126: 2003

- Requirements and test methods for re-usable and limited use protective clothing providing protection against infective agents.

Sizing

The following pictograms designate the range of height & chest sizes suitable for the SC4 coverall splash suit, check your body measurements to make sure you are suitable. Body measurements in cm.



Size	Height	Chest
S	163-175	88-96
M	169-182	96-104
L	176-188	104-112
XL	182-194	112-124
XXL	188-200	124-136

EU DECLARATION OF CONFORMITY

RESPIREX INTERNATIONAL LTD
Unit F Kingsfield Business Centre,
Philanthropic Road,
Redhill,
Surrey RH1 4DP
United Kingdom

Declares that the PPE described hereafter:

Respirex Limited Life SC4 Coverall Splash Suit,
manufactured using 165g/m^2 barrier laminate on non-woven fabric
(Chemprotex™ 300, Respirex Part no. A00132)

- meets the minimum requirements specified by product standards;

EN 14605:2005+A1:2009	*Type 3 (Limited life, full body chemical protective clothing, clothing with liquid tight connections)*
EN 14126:2003	*Type 3-B (Limited life, full body protective clothing against infective agents)*

- is identical to the PPE which is subject of Article 10 type-examination certificate No GB14/91233 (Issue 2) issued by:

SGS FIMKO OY
P.O. Box 30 (Särkiniementie 3)
00211 HELSINKI
Finland
Notified Body 0598

- is subject to the procedure set out in Module D of Regulation (EU) 2016/425 under the supervision of the notified body:

BSI Group The Netherlands B.V.
Say Building, John M. Keynesplein 9, 1066 EP
Amsterdam, Netherlands
EU Notified Body No 2797

These garments are described in the manufacturer's technical file TF091, Issue C.

Done at: RESPIREX, Redhill, Surrey, on 2nd February 2019

Signed:.....

Mark Bellas Simpson (Managing Director)

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	Approved Body No. 0086	**EU Notified Body No 2797**