

Firm and Unit of manufacture:

ZVG Zellstoff-Vertriebs GmbH & Co.KG Urbacher Strasse 4+5, D-53842 Troisdorf

**Basic type description:** 

### Secutex SL (30511-00 to 30516-00)

One-piece coverall made of non woven Microporous 65 g/m², colour white, with hood, zip front opening covered by a flap self-adhesive, elastic at cuffs, ankles, hood and waist, heat seal tape seams.



### Variations description:

Secutex SL (30511-SC to 30516-SC)
Same model with boots

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Finger loop and knitted cuffs available

All items (original and variations) could be made with different position of seams; between shoulders and arms instead of on the front and back side of torso.

Use destination:

**USE** Clothing to be worn to protect against light spray, liquid aerosol or low pressure/low volume splashes, airborne solid particulates. Suitable for:

- Protection against chemical spray (type 4)
- Protection against particular-tight (type 5)
- Protection against chemical splash (type 6)
- Radioactive particle contamination (no rays)
- Infective agents
- Protective suits against pesticides

**Standard:** EN ISO 13688:2013

EN 13034:2005+A1:2009 EN ISO 13982-1:2004+A1:2010 EN 14605:2005+A1:2009 EN 14126:2003+AC:2004

EN 1073-2:2002 EN 1149-5:2008 DIN 32781:2005-5

Category : (according to Regulation EU

2016/425)

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#### Risk Analysis:

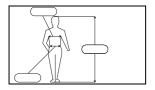
The PPE has been designed to facilitate its use, to ensure that it remains in place during the user's activities and provides a level of comfort appropriate to the level of protection. The DPI also protects:

- Type 6 is intended to be used in cases where risk has been assessed as low and a full liquid permeation barrier is not necessary, i.e. when wearers are able to take timely adequate action when their clothing is contaminated. Type 6 protective clothing form the lowest level of chemical protection and are intended to protect from a potential exposure to small quantities of spray or accidental low volume splashes
- Type 5 offer protection against risks of exposure to chemical products resistant to the penetration of solid particles dispersed in the air for the entire trunk
- Type 4 offer protection against risks spray-tight of chemical substances, during activities where a full liquid permeation barrier is necessary.
- Type 3 offer protection against risks liquid-tight, during activities where a full liquid permeation barrier is necessary.
- Garment that offer protection against exposure to infective agents
- Garment that offer protection against the risks of exposure to radioactive contamination in the form of particles
- Garment with antistatic performance offer protection against electrostatic charges that can trigger fires

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**SIZE DESIGNATION** (EN ISO 13688:2013) dimensions in centimeters.



	S	М	L	XL	XXL	XXXL
height	164-170	170-176	176-182	182-188	188-194	194-200
chest	84-92	92-100	100-108	108-116	116-124	124-132

#### **MATERIALS**

Fabric:	Microporous non woven (UPC Ltd, Korea) (polypropylene laminated with microporous polyetilene) 35g PP +5g glue +25g PE Weight: 65 g/m² Colour: white- blue –orange-green
Zip:	Nylon n.3 – 75 cm single cursor
Elastic:	1/8x0.35 rubber
Seams:	Polyester
Adhesive tape:	20 mm x 75 mm

Protective clothing shall not adversely affect the health or hygiene of the users. The material shall not, in the foreseeable conditions of normal use, release substances generally known to be toxic, carcinogenic, mutagenic, allergenic, toxic to reproduction or otherwise harmful especially for materials in according to the Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) All materials are nickel free.

The PPE has been designed and manufactured with materials and components used by our company for a long time for which do not know the harmful effects for health and safety.

The certificates or test reports of the materials described above are attached to this documentation.

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#### **CONTROL AND TESTS**

#### **Materials**

Controls on the materials based on the specific procedures.

Controls of the weight of the fabric, thickness and colour.

The material conformity is guarantee by ISO 9001 certification

#### Components

Packaging, zip, elastic, label and tape are tested when received to check the conformity to the ZVG specific requirements.

#### **Cut Process**

Before cutting the material, the department checks the table and the fabric for colour, stain or holes.

#### **Sewing Process**

Seams are made using specific procedures as required by the design department.

#### **Packaging**

Before packaging the Quality department checks the products for visual control of seams, zip and labels. Only complying products are folded, packaged and put in the cartons.

#### PERFORMANCE - LEVELS AND CLASSES

Test on garment	Result	Class
Spray test	No stains on the witness	pass
(EN ISO 17491-4 met.B)	coveralls	•
Inward leakage test	L <sub>jmn 82/90</sub> ≤ 30%	pass
(EN ISO 13982-2)	L <sub>s 8/10</sub> ≤ 15%	
		Class 1
	N.p.f. 10.9	(EN 1073-2)
Tensile strength on seams		
(EN ISO 13935-2) (lowest value)	89 N	3/6
Resistance to permeation on seams (EN	>480 min.	6/6
ISO 6530)		
H₂SO₄ 30% and NaOH 40%)		

Test on material	Result	Class
Resistance to penetration (EN 368 – EN ISO 6530)		
,	0.00/	2/2
H <sub>2</sub> SO <sub>4</sub> 30%	0.0%	3/3
NaOH 10%	0.0%	3/3
o-xylene	0.0%	3/3
Butan 1 ol	0.0%	3/3
Repellency to Liquid (EN 368 - EN ISO		
6530)		
H <sub>2</sub> SO <sub>4</sub> 30%	95.0%	3/3
NaOH 10%	95.1%	3/3
o-xylene	91.9%	2/3
Butan 1 ol	94.2%	2/3
Resistance to permeation	NaOH 40%> 480 min	6/6
	H <sub>2</sub> SO <sub>4</sub> 30%> 480 min	
Abrasion Resistance (EN 530 met2)	500 cycles	3/6
Trapezoidal tear resistance (EN ISO	45.3 N weft –	2/6
9073-4)	26.5 N <i>warp</i>	
Tensile strength (EN ISO 13934-1)	100 N weft - 55 N warp	1/6
Puncture resistance (EN 863)	14.4 N	2/6
Flex cracking resistance (EN ISO 7854	No damage after 100.000	6/6
method B)	cycles	

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Resistance to penetration by blood-borne phatogens - phi-x174 bacteriophage test - ISO 16603/16604	20 kPa	Class 6/6
Resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids - ISO 22610 (test microorganism: staphylococcus aureus)	> 75 min	Class 6/6
Resistance to penetration by contaminated liquid aerosols - ISO DIS 22611 (test microorganism: staphylococcus aureus)	Log > 5	Class 3/3
Resistance to penetration by contaminated solid particles - EN ISO 22612 (test microorganism: spores of Bacillus subtilis)	Log CFU ≤ 1	Class 3/3
Surface resistivity (EN 1149-1)	$2.49 \times 10^{9} \Omega$	pass
pH value	7,0 FABRIC 7.3 (Finger loop) 6.1 (knitted)	pass

Test in according to DIN 32781	Result	Class		
Water Vapour Resistance (EN 11092)	18.2 m <sup>2</sup> Pa/W	Class 3		
Water Penetration (EN 20811)	29.811,4 Pa	-		
*Resistance to penetration by sprayed liquid chemicals, emulsions and dispersions (EN 14786)				
Betanal Expert	n.d	-		
Folicur	n.d	-		
Amistar	n.d	-		
Pirimor Granulat	n.d	-		
U 46 D-Fluid	n.d	-		

<sup>\*</sup>n.d.: The active ingredient of the spraying liquid could not be detected on the absorbens material (benchkote) with the extraction and detection method (HPLC-DAD) to be used. Limit value see above.

**Betanal Expert.** Active ingredient. Phenmedipham (75 g/L)-Concentration for application 7,5 mL concentrate per liter praying liquid (aqueous) – Concentration of active ingredient for spraying liquid: 560 mg/L. **Folicur.** Active ingredient. Tebuconazole (250 g/L)-Concentration for application 5 mL concentrate per liter praying liquid (aqueous) – Concentration of active ingredient for spraying liquid: 1250 mg/L. **Amistar.** Active ingredient. Azoxystrobin (250 g/L)-Concentration for application 5 mL concentrate per liter praying liquid (aqueous) – Concentration of active ingredient for spraying liquid: 1250 mg/L. **Pirimor Granulat.** Active ingredient. Piricarb (500 g/kg)-Concentration for application 1,5 g concentrate per liter praying liquid (aqueous) – Concentration of active ingredient for spraying liquid: 750 mg/L. **U 46 D-fluid.** Active ingredient. 2,4-D-DMA-Salt (500 g/L)-Concentration for application 5 mL concentrate per liter praying liquid (aqueous) – Concentration of active ingredient for spraying liquid: 2400 mg/L.

#### LABEL

Marking and manufacturer's information are in the official language of the state of destination Numbers are not smaller than 2 mm and pictograms are not smaller than 10 mm, they are black on white background.

The various components of CE marking must have the same vertical dimension, which may be not less than 5 mm.

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Marking must be durable to the appropriate number of clearing processes

The CE marking must be affixed to each piece of manufactured PPE so as to be visible, legible and indelible throughout the expected life of the PPE



#### Dimension:

CE mark: ≥ 5 mm Pictograms: ≥ 10 mm Letters: ≥ 2 mm

### Care guideline

×	$\boxtimes$	$\bowtie$	$\bowtie$	×	
Do not wash	Do not dry	Do not bleach	Do not iron	Do not dry clean	Flammable fabric

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