

**Firm and Unit of  
manufacture:**

Hubei Wanli Protective Products Co., Ltd.  
Yuanshi,Ganhe,Xiantao,Hubei,China,433000

**Basic type description:**

**WLO3002**

One piece coverall with hood, zipper at the front opening covered by adhesive flap, elastic cuffs, ankles and hood; cut and sewn seams.



**Variations description:**

No variations

**Category :**

(according to 89/686/EEC)

III^

**Use destination:**

Suitable for:

- Protection against chemical spray (type 6)
- Protection against particular-tight (type 5)
- Radioactive particle contamination (no rays)
- Infective agents
- Electrostatic charges

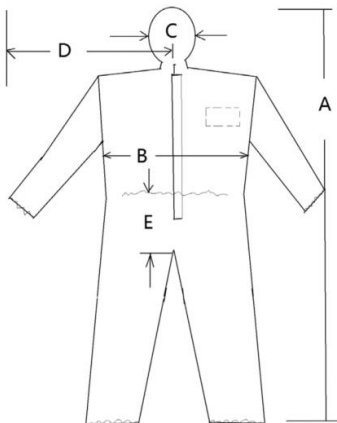
**Standards :**

EN 13034:2005+A1:2009  
EN ISO 13982-1:2004+A1:2010  
EN 14126:2003+AC:2004  
EN 1073-2:2002  
EN 1149-5:2008  
EN ISO 13688:2013

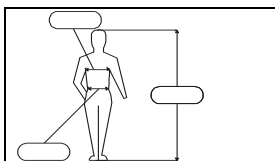
**SIZES** dimensions in centimetres

**c.2 Product size**

						Unit of Measure					cm
Size	A	B	C	D	E	Size	A	B	C	D	E
S, 162*60	198	60	28	86	36	M, 165*62	201	62	28	87	36
tolerance	±3	±2	±2	±2	±2	tolerance	±3	±2	±2	±2	±2
Size	A	B	C	D	E	Size	A	B	C	D	E
L, 168*64	204	64	28	88	36	XL, 171*68	207	68	28	89	39
tolerance	±3	±2	±2	±2	±2	tolerance	±3	±2	±2	±2	±2
Size	A	B	C	D	E	Size	A	B	C	D	E
XXL, 174*70	210	70	28	90	39	XXXL, 177*72	213	72	28	91	39
tolerance	±3	±2	±2	±2	±2	tolerance	±3	±2	±2	±2	±2



**SIZE DESIGNATION** (EN 13688) dimensions in centimetres



	S	M	L	XL	XXL	XXXL
height	173-183	176-186	179-189	182-192	185-195	188-198
Chest - waist	92-100	96-104	100-108	108-116	112-120	116-124

## MATERIALS

Fabric:	Microporous, polypropylene+ polyethylene film (55+/- 2 g/m <sup>2</sup> ) 20g Breathable film+3g Glue+30g PPSB-
Zip :	polyester
Elastic:	rubber
Seams:	polyester
Adhesive tape:	polyester

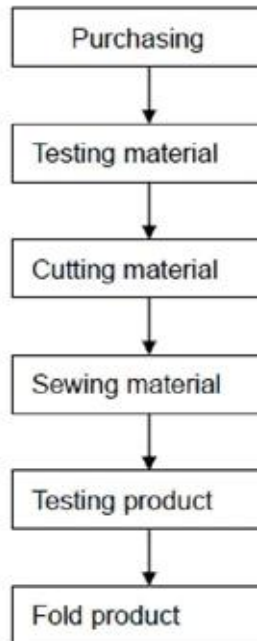
Protective clothing shall not adversely affect the health or hygiene of the users. The material shall not, in the foreseeable conditions of normal use, release substances generally known to be toxic, carcinogenic, mutagenic, allergenic, toxic to reproduction or otherwise harmful especially for materials 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.

## CONTROL AND TEST



The company has established a company standard according to related European standards, in which the test items and the sampling rules are defined. For the material testing includes the items as following:

- 1) Appearance
- 2) Dimension check
- 3) Gram weight
- 4) Material safety data sheet

And the verification of the test report provided by the supplier should be done as the income testing. The company has a document named Testing procedure and standard for the purchased products. Sampling rules will comply with the international standard such as ISO2859. The ADL level will be difference according to different testing items. We do evaluation to the supplier based on the data provided by them. The evaluation result has been approved and the record has been kept. The final products have also been tested according to the standards. The supplier's products could meet the requirement.

Final product testing including the items as following:

- 1) Appearance
- 2) Dimension check
- 3) Gram weight
- 4) Structure of the products including all the seams and accessories
- 5) Label and instruction

Performance of whole suit					
Test	Requirement				Result /Class/Conformity
Resistance to liquid penetration Spray test type 6 (EN ISO 17491-4 met. A – EN 13034)					Pass
Resistance to aerosol penetration Inward leakage type 5 (EN ISO 13982-2 – EN ISO 13982)	$L_{jmn} 82/90 \leq 30\%$ $L_{s} 8/10 \leq 15\%$				PASS
Nominal protection factor (EN ISO 13982-2 – EN 1073-2)	Class	TIL <sub>E</sub> %	TIL <sub>A</sub> %	Fpn	Class 2
	3	0,3	0,2	500	
	2	3	2	50	
	1	30	20	5	
Practical performance tests (EN 1073-2)					Compliant
Electric surface resistance	$\leq 2.5 \times 10^9$				Pass
Seams: strength (EN ISO 13935-2)	Class 6	> 500 N			Class 3
	Class 5	> 300 N			
	Class 4	> 125 N			
	Class 3	> 75 N			
	Class 2	> 50 N			
	Class 1	> 30 N			

Performance of fabric					
Test	Requirement				Result/Class/Conformity
Resistance to penetration by liquids (EN ISO 6530 – EN 13034)	Class 3: < 1% Class 2: < 5% Class 1: < 10%				H <sub>2</sub> SO <sub>4</sub> 30%: class 3 NaOH 10%: class 3 o-xilene: class 3 Butan-1-ol: class 3
Repellency to liquid (EN ISO 6530 – EN 13034)	class 3: > 95% class 2: > 90% class 1: > 80%				H <sub>2</sub> SO <sub>4</sub> 30%:class 3 NaOH 10%:class 3 o-xilene:class 2e Butan-1-ol:class 3
Abrasion Resistance (EN 530 - method 2)	Class 6	> 2000 cycles			Class 2
	Class 5	> 1500 cycles			
	Class 4	> 1000 cycles			
	Class 3	> 500 cycles			
	Class 2	> 100 cycles			
	Class 1	> 10 cycles			
Trapezoidal tear resistance (EN ISO 9073-4)	Class 6	> 150 N			Class 2
	Class 5	> 100 N			
	Class 4	> 60 N			
	Class 3	> 40 N			
	Class 2	> 20 N			
	Class 1	> 10 N			
Tensile strength (EN ISO 13934-1)	Class 6	> 1000 N			Class 1
	Class 5	> 500 N			
	Class 4	> 250 N			
	Class 3	> 100 N			
	Class 2	> 60 N			
	Class 1	> 30 N			
Puncture resistance (EN 863 - EN 13034)	Class 6	> 250 N			Class 2
	Class 5	> 150 N			
	Class 4	> 100 N			
	Class 3	> 50 N			
	Class 2	> 10 N			
	Class 1	> 5 N			
Flex cracking resistance (EN 7854)	Class 6	> 100 000 c.			Class 6
	Class 5	> 40 000 c.			
	Class 4	> 15 000 c.			
	Class 3	> 5 000 c.			
	Class 2	> 2 500 c.			
	Class 1	> 1 000 c.			
Blocking resistance (EN 25978 - EN 1073-2)					No adherence
Ignition and flammability (EN 13274-4 - EN 1073-2)					Compliant

EN 14126:2003+AC:2004		
Test	Requirement	Result /Class/Conformity
Bursting strength (13938-1)	Classe 6	> 850 kPa
	Classe 5	> 640 kPa
	Classe 4	> 320 kPa
	Classe 3	> 160 kPa
	Classe 2	> 80 kPa
	Classe 1	> 40 kPa
Resistance to penetration by blood-borne pathogens - phi-x174 bacteriophage test - ISO 16603/16604	Class 6	20 kPa
	Class 5	14 kPa
	Class 4	7 kPa
	Class 3	3,5 kPa
	Class 2	1,75 kPa
	Class 1	0 kPa
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 5	60 < t ≤ 75
	Class 4	45 < t ≤ 60
	Class 3	30 < t ≤ 45
	Class 2	15 < t ≤ 30
	Class 1	≤ 15 min
Resistance to penetration by contaminated liquid aerosols - ISO DIS 22611 (test microorganism: staphylococcus aureus)	Class 3	log > 5
	Class 2	3 < log ≤ 5
	Class 1	1 < log ≤ 3
Resistance to penetration by contaminated solid particles - EN ISO 22612 (test microorganism: spores of Bacillus subtilis)	Class 3	≤ 1
	Class 2	1 < log ufc ≤ 2
	Class 1	2 < log ufc ≤ 3
EN ISO 13688:2013		
Test	Requirement	Result /Class/Conformity
pH (EN ISO 13688 – ISO 3071)	> 3.5 < 9.5	Pass

**EXHAUSTIVE LIST OF ESSENTIAL REQUIREMENTS OF HEALTH AND SAFETY  
(ANNEX II directive 89/686/EEC)**

Clause of standard <b>EN ISO 13688:2013</b>	Clauses of EU Directive 89/686/EEC Annex II	
5.3	1.2.1	Absence of risks and other inherent nuisance factors
4.2	1.2.1.1	Suitable constituent materials
4.4	1.2.1.2	Satisfactory surface condition of all PPE parts in contact with the user
8	1.4	Information supplied by the manufacturer
6,7	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety

Clause of standard <b>EN 13034</b>	Clauses of EU Directive 89/686/EEC Annex II	
4.1	1.2.1	Absence of risks and other nuisance factor
4.1	1.2.1.1	Suitable constituent materials
4.1	1.3.2	Lightness and design strength
4.1	3.10.2	Protection against dangerous substance and infective agents
4.2.1	3.10.2	Protection against dangerous substance and infective agents
4.2.2	1.3.2	Lightness and design
5.1	1.2.1.3	Maximum permissible user impediment
5.1	2.4	PPE subject to ageing
5.1	3.10.2	Protection against dangerous substance and infective agents
5.2	1.1.1	Ergonomics
5.2	1.2.1.3	Maximum permissible user impediment
5.2	3.10.2	Protection against dangerous substance and infective agents
6	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety
7	1.3.3	Compatibility of different classes of PPE designed for simultaneous use
7	2.4	PPE subject to ageing
7	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety

Clause of standard <b>EN ISO 13982-1</b>	Clauses of EU Directive 89/686/EEC Annex II	
4.1	1.2.1.1	Suitable constituent materials
4.1	1.3.2	Lightness and design strength
4.2	1.3.2	Lightness and design strength
4.2.1	3.10.2	Protection against dangerous substance and infective agents
4.3	1.3.1	Adaptation of PPE to user morphology
4.3	1.3.3	Compatibility of different classes of PPE designed for simultaneous use
4.3.1	1.1.2.1	Highest level of protection possible
4.3.1	1.2.1.2	Satisfactory surface condition of all PPE parts in contact with the user
4.3.2	1.1.1	Ergonomics
4.3.2	1.1.2.1	Highest level of protection possible
4.3.2	1.2.1.3	Maximum permissible user impediment
4.3.2	3.10.2	Protection against dangerous substance and infective agents
5, 6	1.4	Information supplied by the manufacturer
6	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety
6	1.3.3	Compatibility of different classes of PPE designed for simultaneous use
5, 6	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety









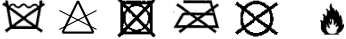
Clause of standard <b>EN 1073-2</b>	Clauses of EU Directive 89/686/EEC Annex II	
4	1.1.1	Ergonomics
4	1.1.2.1	Highest level of protection possible
4.2, 4.3, 4.4	1.1.2.2	Classes of protection
4	1.2.1	Absence of risks and other nuisance factors
4.1.1, 4.1.2	1.3.1	Adoption of PPE to users morphology
4.1.2, 4.4	1.3.2	Lightness and design strength
4.1.4, 4.1.2	1.3.3	Compatibility of different classes of PPE designed for simultaneous use
7	1.4	Information supplied by the manufacturer
4.1.2	2.2	PPE enclosing the parts of the body to be protected
6,7	2.4	PPE subject to ageing
6	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety
4,6,7	3.9.2.1	Protection against external radioactive contamination

Clause of standard <b>EN 1149-5</b>	Clauses of EU Directive 89/686/EEC Annex II	
6	1.4	information supplied by the manufacturer
5	2.12	PPE bearing one or more identification or recognition marks directly relating to health and safety
4.2	2.6	PPE for use in explosive atmospheres







Clause of standard <b>EN 14126</b>	Clauses of EU Directive 89/686/EEC Annex II	
4.1.4	1.1.2.2	Classes of protection
4.3	1.3.1	Adoption of PPE to users morphology
4.1.2, 4.2	1.3.2	Lightness and design strength
6	1.4	information supplied by the manufacturer
5	2.12	PPE bearing one or more identification or recognition marks directly or indirectly relating to health and safety
4.3, 4.1.4	3.10.2	Protection against dangerous substance and infective agents

**LABEL (Example):**

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.  
 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

Manufacturer →	 <b>XIAN WANLI</b> <a href="http://www.hbwanli.com">www.hbwanli.com</a>	
Garment model identification →	<b>Coverall code WLO3001</b>	
Category →	<b>PPE category III</b>	
CE marking →	 <span style="margin-left: 20px;">0624</span> <span style="margin-left: 40px;">Batch Number</span>	
European standards →	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <small>EN 13034/05+A1/09 Type 6B EN ISO 13982-1/04+A1/10 Type 5B</small>   </div> <div style="text-align: center;"> <small>EN 1073-2/02</small>   </div> <div style="text-align: center;">   <small>← wearer (EN ISO 13688)</small> </div> </div>	
Pictograms →	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <small>EN 1149-5/08</small>   </div> <div style="text-align: center;"> <small>EN 14126/03+AC/04</small>    <small>Do not re-use</small> </div> </div>	
Read the instruction for use →	 <span style="margin-left: 100px;"><b>Size</b></span>	← Size
Care guideline →		

**Care guideline**

					
Do not wash	Do not bleach	Do not tumble dry	Do not iron	Do not dry clean	Flammable fabric