



5 902973 659238

I/C	COV-456			
P/C	C700	NUMBER	59238	PACKING
SIZES	S, M, L, XL, 2XL, 3XL			1 / 50 pc. / szt.
COLOURS	W			

EN Instruction for use

PL Instrukcja użytkowania

support.rawpol.com for other languages

DE RU RO UA CZ SK HU LT LV EE BY MD BG SI ES AT NL FR DA PT IT SE FI NO TR GR



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PRODUCT NAME:

PROTECTIVE OVERALLS • KOMBINEZON OCHRONNY

STANDARDS

EN ISO 13688:2013+A1:2021

EN 14126:2003+AC:2004

EN 1073-2:2002

Class 1

EN ISO 13982-1:2004+A1:2010

Type 5-B

EN 1149-5:2018

Class 1

EN 13034:2005+A1:2009

Type 6-B

EN 14605:2005+A1:2009

Type 4-B

RAW-POL, Julianów 50, 96-200 Julianów, Poland

distribution

REIS

Workwear

professional safety GOODS

The member of REIS GROUP

v. B.C303.104

Resistance to penetration to liquid (EN ISO 6530 – EN 13034)	Class 3: < 1% Class 2: < 5% Class 1: < 10%	H ₂ O, 30%: class 3 NaOH 10%: class 3 α-xylene: class 3 Butan-1-ol: class 3 H ₂ O, 30%: class 3 NaOH 10%: class 3 α-xylene: class 2 Butan-1-ol: class 3
Repellency to liquid (EN ISO 6530 – EN 13034)	class 3: > 95% class 2: > 90% class 1: > 80%	
Abrasion Resistance (EN 530 - method 2)	> 100 cycles	Class 2
Trapezoidal tear resistance (EN ISO 9073-4): - longitudinal direction - transversal direction	> 40 N < 60 N > 20 N < 40 N	Class 3 Class 2
Tensile strength (EN ISO 13934-1)	> 30 N < 60 N	Class 1
Puncture resistance (EN 863 - EN 1073-2)	> 10 N < 50 N	Class 2
Flex cracking resistance (EN 7854)	> 100 000 c.	Class 6
Blocking resistance (EN 25978 - EN 1073-2)		Pass
Ignition and flammability (EN 13274-4 - EN 1073-2)		Pass
Permeation by liquids (EN ISO 6529-EN 14605)	> 30 < 60 min	H ₂ O, 30% Class 2
Charge decay (test condition EN 1149-3)	t50 < 0.01	Pass
Bursting strength (13938-1)	> 160 < 320 kPa	Class 3
Resistance to penetration by blood-borne pathogens - phi-x174 bacteriophage test - ISO 16603/16604	20 kPa	Class 6
Resistance to penetration by infective agents due to mechanical contact with substances containing contaminated liquids - ISO 22610 (test microorganism: staphylococcus aureus)	t > 75	Class 6
Resistance to penetration by contaminated liquid aerosols - ISO DIS 22611 (test microorganism: staphylococcus aureus)	log > 5	Class 3
Resistance to penetration by contaminated solid particles - EN ISO 22612 (test microorganism: spores of Bacillus subtilis)	Log ≤ 1	Class 3
pH (EN 340 – ISO 3071)	3.5 > pH > 9.5	Pass

Limitations: Do not use the product for other than in accordance with the intended purpose, recommendations in the instruction and when the type of work is related to the risk of the product being caught up by moving objects, e.g. moving parts of machines and such risk is associated with a health or safety hazard. This product does not protect parts of the body which it does not cover. Exposure 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 person responsible for the choice of PPE shall be the sole judge of the suitability for the type of protection required and the corrected combinations of coveralls and additional equipment. Protection against risks and dangers not mentioned in the instructions is not guaranteed.

Use and operation: The personal liability of the user is determined to ensure protective function of the product. This product is intended to be worn. Make sure that the size corresponds with the user. Do not make any modifications on product. Before using, the user checks on his/her own responsibility, whether the product is suitable for working activities, is complete, clean and whether all functions are guaranteed. Check the damages/defects, whether they could have a negative impact on the safety functions (e.g. cracks, holes, ripped seams, unsewed parts, broken zippers and the like). This product shall be put on the body. For this purpose open the zip and dress up taking care not to break the material, then close the zip and seal the flap. Tape the adhesive stripe of the flap in such way that no creases appear in the fabric of flap and overall. In case of airborne solid particulates it is advisable to cover and tape the zipper and to wrap the cuffs and ankles with adhesive tape. The attention should be drawn that the product lies comfortably and gives freedom of movement (to do this, match all kinds of adjustments, if any). The protection characteristics are valid only if the item is correctly dressed and closed. This product does not protect parts of the body which it does not cover. Protect uncovered parts of body (hands, eyes, respiratory areas, foot) with protective gloves, boots, full mask attached to the suit with adhesive tape in such a way as to prevent chemicals from entering the suit and coming into contact with the wearer's clothing or skin, and offering the same level of protection as required for the work environment. A full mask with filter appropriate for the exposure conditions and tightly connected to the hood and additional taping around the hood, cuffs, ankles and the zipper flat are required to achieve the claimed protection. The person responsible for the choice of PPE shall be the sole judge for the correct combination of full body protective coverall and additional equipment (gloves, boots, respiratory protective equipment etc.) and for how long this coverall can be worn on a specific job with respect to its protective performance, wear comfort and thermal comfort (overheating the body). The manufacturer is not responsible for the incorrect choice of the suit or additional personal protective equipment and for using the product contrary to the recommendations of this manual. In order to remove the product, first unfasten/unzip all previously fastened/zipped elements and unfold previously sealed elements, if any. Then remove the coverall carefully. In the event of clothing contamination with a chemical substance, follow the procedures in force at the workplace. While working, pay attention to keep the protective functions. Loss of the protective functions means that the product has been worn. Do not use a damaged or worn out product. The product does not have additional equipment and spare parts.

Materials used to make the product, should not adversely affect the user's hygiene or health. However, any substance contained in the material of the product or being a component of the product can be allergen, such as cotton, leather, metal parts, latex, stains, etc. It is recommended that

EN INSTRUCTION AND INFORMATION FOR THE USERS

Importer: RAW-POL STEFAŃSKI SPÓŁKA KOMANDYTOWO-AKCYJNA, Julianów 50, 96-200 Julianów, Poland.

This product belongs to the Personal Protective Equipment (PPE), defined in the Regulation (EU) 2016/425 of the European Parliament and of the Council and meets the guidelines of that regulation. It has been assigned to the III category.

Standards: EN ISO 13688:2013+A1:2021 „Protective clothing. General requirements”; EN ISO 13982-1:2004+A1:2010 „Protective clothing for use against solid particulates - Part 1: Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates (type 5 - type clothing)”; EN 13034:2005+A1:2009 „Protective clothing against liquid chemicals. Performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals (Type 6 and Type PB [6] equipment)”; EN 14126:2003+AC:2004 „Protective clothing. Performance requirements and test methods for protective clothing against infective agents”; EN 1073-2:2002 „Protective clothing against radioactive contamination. Part 2: Requirements and test methods for non-ventilated protective clothing against particulate radioactive contamination”; EN 1149-5:2018 „Protective clothing. Electrostatic properties. Part 5: Material performance and design requirements”; EN 14605:2005+A1:2009 „Clothing for the protection against liquid chemicals. Requirements concerning the whole body protection clothing, with joints that do not pass the liquid as a fluid matter (3 type) or sprayed (4 type), together with goods that ensure only partial protection of the body (PB[3] and PB[4] types).”

The notified body: CENTRO TESSILE COTONIERO E ABBIGLIAMENTO SPA, Piazza S. Anna, 2, 21052 Busto Arsizio (VA), Italy, number of the body: 0624

The supervisory body: CENTRO TESSILE COTONIERO E ABBIGLIAMENTO SPA, Piazza S. Anna, 2, 21052 Busto Arsizio (VA), Italy, number of the body: 0624

Product/description: Protective overalls. Detailed characterisation of the product is provided on rawpol.com

Purpose: Risk against the overall is intended to protect:

EN 13034:2005 + A1:2009 Type 6 – protective clothing type 6 (garments against chemicals offering limited performance) is intended to be used for potential exposure to a light spray, liquid aerosols or low pressure, low volume splashes, against which a complete liquid permeation (at the molecular level) barrier is not required, when wearers are able to take timely adequate action when their clothing is contaminated. Type 6 protective clothing against chemicals have been tested according to the test for complete clothing (point 5.2 of EN 13034 standard).

EN ISO 13982-1:2004 + A1:2010 Type 5 – protective clothing type 5 against chemicals, resistant to penetration by airborne solid particles. The standard is applicable only to airborne solid particulates. It is not applicable to other forms of challenge by solid chemicals, e.g. penetration of chemical dust through materials by rubbing or flexing, which may form the object of separate standards. These garments are full-body protective clothing, i.e. covering trunk, arms and legs.

EN 14605:2005 + A1:2009 Type 4 - Type 4 chemical protection clothing with limited use intended for use as protection against spray-tight of chemicals, during activities where a complete liquid permeation barrier is necessary. Clothing that protects the whole body, i.e. the parts of the body it covers.

EN ISO 14126:2003 + AC:2004 - is intended to be used for protection against exposure to infective agents.

EN 1073-2:2002 – protective clothing is intended to be used for protection against risks of exposure to particulate radioactive contamination. The standard does not apply to protection against ionizing radiation, as well as protection of patients against contamination with radioactive substances used for diagnostic and therapeutic purposes.

EN 1149-5:2018 – electrostatic dissipative protective clothing, used as a part of a total earthed system to avoid incendiary discharges, where the minimum ignition energy of an explosive atmosphere is not less than 0.016 mJ.

The level of protection was obtained on the basis of tests carried out according to conditions described in the standards / specifications to which they apply. The product provides protection against the above risks and it is intended for use in the environments in which they occur. Always conduct a risk assessment in a given work environment to verify whether the product provides protection against all risks available in this environment. Due to the scope of protection, the selection of an appropriate PPE requires specialist knowledge, therefore it must be performed by people who have it and were trained to the extent to which the suit protects and who know the conditions and hazards in a specific work environment, e.g. occupational health and safety specialists or the employer (in accordance with the applicable law, it is the responsibility of the employer to provide appropriately selected personal protective equipment). Users must also be trained on the risks and how to use the suit in a given work environment.

The table below shows the performance tested under laboratory conditions. It should be noted that tests may not reflect the reality of use and do not account for factors such as excessive heat and mechanical wear.

Test on whole suits	Requisite				Result (incl. EN14325:2004)
Resistance to liquid penetration Spray test type 4 (EN ISO 17491-4 met. B – EN 14605)					Pass
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)	Ljmn 82/90 ≤ 30% Ls 8/10 ≤ 15%				Pass
Nominal protection factor (EN ISO 13982-2 – EN 1073-2)	Class	TIL ₁ %	TIL ₂ %	Fpn	Class 1
	3	0,3	0,2	500	
	2	3	2	50	
	1	30	20	5	
Practical performance tests (EN 1073-2)					Pass
Seams: strength (EN ISO 13935-2)	>75 < 125 N				Class 3
Seams: permeation by liquids (EN ISO 6529 - EN 14605)	> 30 < 60 min				H ₂ O, 30% Class 2
Test on fabric	Requisite				Result (incl. EN14325:2004)

sensitive persons test the product or seek for medical advice before use.

Warnings:

- Choose products compatible with area of work.
- The disposable item must be replaced after every use.
- If any bleeding, punctures etc. occur, leave the working area and wear new coverall.
- The prolonged wearing of chemicals protective suits may cause thermal discomfort, heat stress and also heat stroke. These hazards can be reduced or eliminated by using of absorbing underwear or cooling clothing, changes in the organization of work and the use of rest periods etc. If the user feels any thermal or other discomfort, he or she should inform the supervising person about it and go to rest in a designated place. It is not allowed to continue work in such situation.
- The person wearing the electrostatic dissipative protective clothing shall be properly earthed. The resistance between the person's skin and the earth shall be less than 10⁵ Ω e.g. by wearing adequate footwear on dissipative or conductive floors. The specific method of earthing is determined by the person responsible for safety in a given work environment and who knows its properties.
- 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 is intended to be worn in Zones 1, 2, 20, 21 and 22 (see EN 60079-10-1 [7] and 60079-10-2 [8]) in which the minimum ignition energy of any explosive atmosphere is not less than 0,016 mJ.
- Electrostatic dissipative protective clothing shall not be used in oxygen enriched atmospheres, or in Zone 0 (see 60079-10-1 [7]) without prior approval of the responsible safety engineer.
- The electrostatic dissipative performance of the electrostatic dissipative protective clothing can be affected by wear and tear, laundering and possible contamination as well as the relative humidity level (tests performed according to the conditions described in EN1149-5).
- Electrostatic dissipative protective clothing shall be worn in such way that it permanently covers all non-complying materials during normal use (including bending movements).
- This coverall meets the requirement L_{pmn, 82/90} ≤ 30% L_{s, 8/10} ≤ 15%.
- The method provides a measure of the inward leakage into protective clothing by dry aerosol particles (generated from a sodium chloride solution) having a massmedian aerodynamic diameter of 0,6 μm.
- These garments are flammable - Keep away from fire.
- Abandon the place of work immediately in case of damage of the product.

The user shall not take off the garment when he is still in the risk area.

Material: polypropylene + polyethylene. 63 g/m²

Size: The product should be of sufficient size which must be adjusted before starting work. The product size is provided directly on the product or on internal label or on packaging. Available size range is specified in the field SIZES. Full size range is provided in the below table.

	S	M	L	XL	2XL	3XL
height	158-166	166-174	174-182	182-190	190-198	198-206
chest	86-94	94-102	102-110	110-118	118-129	129-141
waist	74-82	82-90	90-98	98-106	106-117	117-129

Maintenance and cleaning:

☒ - Do not wash, ☒ - Do not bleach / chlorine, ☒ - Do not tumble dry, ☒ - Do not iron, ☒ - Do not dry clean.

Storage: The product should be stored and transport in the original packing at the appropriate temperature, in dry and well ventilated place, away from heat sources and solvent vapors, protect against exposure to sunlight and UV rays. Too high humidity of air, too high or low temperature or intense light can adversely impact the product quality. Manufacturer accepts no liability for the quality of the product stored contrary to the instructions. This may result in a lowering of the product protection level or its losing.

Type of packaging: It is recommended to distribute (including transport) the product in the original manufacturer's packaging. Loading, transport and unloading should take place in environment protecting against splashes, dirt and damage.

Product durability can be estimated on the basis of the product wear and tear. Considering various use intensities and environmental factors, such as sunlight, rain, etc., it is not possible to provide a precise span. The product retains its protective properties up to the moment of a damage. Occurrence of mechanical damages means that the product should be immediately withdrawn from use. The expected shelf life of the product is 5 years from the production date indicated on the label.

Date of manufacture is indicated on the label attached to the product in the form of the month and year.

The access to the EU declaration of conformity can be accessed at support.rawpol.com.

In the event that this manual is out-of-date because of changes in law or other factors, download the new version. Current instructions are available on the rawpol.com or support.rawpol.com. This manual is marked with version v. B.C303.104, where B.C303 is the identifier of product group and 104 the subsequent version number. Before starting operation, verify having current/appropriate operation manual for the product, read this manual carefully and keep it for duration of the use of protection. If the markings explained herein are not the same as the markings on the product or on the packaging, this means that the manual is for other lot or other product. In this case, it is essential to contact the person who made the manual available, or contact the manufacturer or the authorized representative of the manufacturer, in order to obtain a document to the lot, which you have. It is essential to verify having current/appropriate manual for the possessed product. If the manual is out-of-date or inappropriate to the lot, it is essential to obtain current/appropriate manual and refer to its contents. **Do not start operation without reading information included in the current/correct operation manual!**

THIS MANUAL CAN BE REPEATEDLY COPIED IN ORDER ANY USER CAN READ THE INFORMATION INCLUDED HEREIN.

In any doubts please contact with a health and safety specialist, the manufacturer or the authorized representative of the manufacturer in order to explain them. Inquiries can also be submitted via the website www.rawpol.com

Legend of the sample labeling: [A] – commodity code of importer, [B] – commodity code of manufacturer, [C] – size, [D] – conformity mark and number of the notified body involved in the quality assessment of the production process and product control, [E] – before use become familiar with the manufacturer's identification mark, [G] – standards numbers with the year of publication as well as pictograms and markings indicating the scope of the planned protection (EN 13034 Type 6-B, EN ISO 13982-1 Type 5-B, EN 14605 Type 4-B - protection against chemicals (suffix „8” next to the type of clothing indicates additional protection against biological agents), EN 14126 - protection against biological agents, micro-organism hazards, EN 1073-2 class1 - protection against particulate radioactive contamination, EN 1149-5 - protection against static electricity), [H] - date of manufacture, [I] – lot number, [J] – do not re-use, [K] – flammable fabric, keep away from fire, [L] – pictograms for maintenance and cleaning, [M] – name and address of importer, [N] – name and contact address of manufacturer

Explanation of used symbols: I/C – commodity product code of importer, P/C – commodity product code of manufacturer (manufacturer: Hubel Lioncare Protective Products Co. Ltd. 96-200 Julianów, 50, Poland), NUMBER – number of the article, SIZES – available range of sizes,

