



CODE	
NUMBER	06299
SIZES	M, L, XL, 2XL, 3XL
COLOURS	PG, YG

EN Instruction for use

DE Gebrauchsanweisung

PL Instrukcja użytkowania

RU Инструкция по применению

UA Інструкція для користування

LT Naudojimo instrukcija

support.rawpol.com for other languages

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

PRODUCT NAME:

Protective clothing Одяг захисний
Schutzbekleidung Apsauginiai drabužiai
Odzież ochronna
Одежда защитная



* restricted wearing time • beschränkte Tragezeit • ograniczony czas noszenia • ограниченное время ношения • обмежений час носіння • ribotas dėėjimo laikas
** with BLUE-YELLOW-B / BLUE-ORANGE-B bib-pants • mit BLUE-YELLOW-B / BLUE-ORANGE-B Latzhose • z ogrodnickimi BLUE-YELLOW-B / BLUE-ORANGE-B • с комбинезоном BLUE-YELLOW-B / BLUE-ORANGE-B • з комбінезоном BLUE-YELLOW-B / BLUE-ORANGE-B • su BLUE-YELLOW-B / BLUE-ORANGE-B Dungarees

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



The member of REIS GROUP

v. B.C2RRRC.104

EN INSTRUCTION AND INFORMATION FOR THE USERS

Manufacturer: RAW-POL, Stefania S.K.A., Julianów 50, 96-200 Julianów, Poland.
This product belongs to the Personal Protection 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 II category.
Standard: EN ISO 20471:2013+A1:2016 „High visibility clothing. Test methods and requirements”; EN 343:2019 „Protective clothing. Protection against rain”; EN 342:2017 „Protective clothing. Ensembles and garments for protection against cold”; EN ISO 13688:2013+A1:2021 „Protective clothing. General requirements.”

The notified body: SGS Fimko Ltd, Takomatie 8, FI-00380 Helsinki, Finland, number of the body: 0598.
Product/description: Protective high visibility clothing - protective insulated jacket. Composition: shell: 100% polyester coated with polyurethane; padding: 100% polyester. Detailed characterisation of the product is provided in rawpol.com.
Purpose: The clothing of high visibility is intended to assure increased visibility of the user in any light, when he/she is in the field vision of vehicle operators or other mechanized equipment in the daytime and in the dark under the lights of the vehicles. Clothing also protects against risks such as: atmospheric conditions that are not of an extreme nature, i.e. effects of precipitation (e.g. rain, snowflakes), fog and ground humidity and cold temperature equal to -5°C or lower. These effects comprise not only low air temperatures, but also humidity and air velocity (maintaining the air permeability class recommendation). The garment is intended to protect against water penetration. The clothing of high visibility is intended to assure increased visibility of the user in any light, when he/she is in the field vision of vehicle operators or other mechanized equipment in the daytime and in the dark under the lights of the vehicles. Clothing also protects against risks such as: atmospheric conditions that are not of an extreme nature, i.e. effects of precipitation (e.g. rain, snowflakes), fog and ground humidity. The level of protection was obtained on the basis of tests carried out according to conditions described in the norms/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. Please always carry out a risk assessment in a given work environment to verify whether the product provides protection against all risks available in this environment. The product should be worn as intended (see list below).
Values in the below schedule are based on the conditions that air temperature is equal to mean radiant temperature, relative humidity is about 50%, air velocity is 0.4 m/s or 3 m/s respectively, air permeability is 50 mm/s and body motion is 1 m/s. Higher air movement velocities will result in higher temperatures in the inventory due to the cooling effects caused by air movement (see EN ISO 11079).
Attention! It is possible that the appropriate level of insulation of the whole body will be insufficient to avoid hypothermia of sensitive parts of the body (e.g. hands, feet, face) and the accompanying risk of frostbite. Hand protection against cold is covered in EN 511.
Resultant effective thermal insulation of clothing I_{cl,eff} and ambient temperature conditions for heat balance at different durations of exposure

Insulation I _{cl,eff} m ² · K/W	User in a standing position, 75 W/m ²							
	Air velocity							
	0.4 m/s		3 m/s		0.4 m/s		3 m/s	
	8 h	1 h	8 h	1 h	8 h	1 h	8 h	1 h
0.265	13	0	19	7	19	7	19	7
0.310	10	-4	17	3	17	3	17	3
0.390	5	-12	13	-3	13	-3	13	-3
0.470	0	-20	7	-9	7	-9	7	-9
0.540	-5	-26	4	-14	4	-14	4	-14
0.620	-10	-32	0	-20	0	-20	0	-20

Resultant effective thermal insulation of clothing I_{cl,eff} and ambient temperature conditions for heat balance at different activity levels and durations of exposure

Insulation I _{cl,eff} m ² · K/W	User in a standing position							
	light 115 W/m ²				moderate 170 W/m ²			
	0.4 m/s		3 m/s		0.4 m/s		3 m/s	
	8 h	1 h	8 h	1 h	8 h	1 h	8 h	1 h
0.265	3	-12	9	-3	-12	-28	-2	-16
0.310	-2	-18	6	-8	-18	-36	-7	-22
0.390	-9	-28	0	-16	-29	-49	-16	-33
0.470	-17	-38	-6	-24	-40	-60	-24	-43
0.540	-24	-45	-11	-30	-49	-71	-32	-52
0.620	-31	-55	-17	-38	-60	-84	-40	-61

The given temperature values apply only if the insulation is evenly distributed over the body and the hands, feet and head are properly covered. During continuous exposure to the cold, it is recommended to avoid sweating, as the absorption of moisture gradually reduces the insulation.

WARNING – Restricted wearing time according to the following table:

Temperature of working environment	25°C	20°C	15°C	10°C	5°C
Wearing time (min)	60	75	100	240	-

This table is valid for medium physiological strain M = 150 W/m², standard man, at 50% relative humidity and wind speed v₁ = 0.5 m/s.

Recommended maximum continuous wearing time (min), for a complete suit consisting of jacket and trousers without additional lining for thermal insulation:

	Class							
	1		2		3		4	
Temperature of working environment	R _{cl} > 40		25 < R _{cl} ≤ 40		15 < R _{cl} ≤ 25		R _{cl} ≤ 15	
°C	m ² Pa/W		m ² Pa/W		m ² Pa/W		m ² Pa/W	
25	60		105		180		-	
20	75		250		-		-	
15	100		-		-		-	
10	240		-		-		-	
5	-		-		-		-	

„-“ means no limit for wearing time

This table is valid for medium physiological strain M = 150 W/m², standard man, at 50% relative humidity and wind speed v₁ = 0.5 m/s.

With effective ventilation openings and/or break periods the time for wearing can be prolonged.

Information concerning risk situations taking into consideration the garment's classes and factors related to the risk level in accordance with EN ISO 20471:

Risk level	Vehicle speed	Factors related to the risk level	
		Type of road user	
High risk ISO 20471 class 3	> 60 km / h	passive (the person on the road, not participating into vehicular traffic and with attention focused on something other than traffic)	
High risk ISO 20471 class 2	> 60 km / h	passive (the person on the road, not participating into vehicular traffic and with attention focused on something other than traffic)	
High risk ISO 20471 class 1	≤ 30 km / h	passive (the person on the road, not participating into vehicular traffic and with attention focused on something other than traffic)	

Restrictions: Do not use the product other than in accordance with the intended purpose, recommendations in the instruction, in high-risk conditions (where the PPE of II category are appropriate) 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 PPE being caught is associated with a health or safety hazard. This product does not protect parts of the body, which it does not cover. If the product is intended for use at temperatures below -50°C, in order to ensure full body protection, additional PPE appropriate to the risk should be used in accordance with the risk PPE assessment carried out in the work environment, e.g. gloves, gloves according with EN 511, footwear, thermal protection, respiratory protection. Protection is provided only when wearing a complete clothing set. In accordance with the EN342 standard in composition recommended standard underside clothing B with use with clothing sets include: long-sleeved undershirt, long Johns, socks (knee length), boot warmers, thermal jacket, thermal pants, knitted gloves and a balaclava. More information on such a reference clothing set can be obtained through the RAW-POL company. In the scope EN 343 garments for protection against other effects than precipitation (e.g. water splashes, waves) are excluded for this standard. 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. This product must be put on the body. If the product has any fasteners, they need to be fastened/zippered. If the product has matches to tie, they need to be tied. It should be noted that the product lies comfortably and gives freedom of movement (to do this, match all kinds of adjustments, if any). In order to remove the product, first unfasten/unzip all previously fastened/zippered elements and then previously tied elements, if any. If the product has a hood hiding in the collar, it is recommended to store it tucked away when not in use. Before storing, check if the hood is dry, if not, you have to dry it, then roll it up, put it in the collar and fasten/zip the fasteners. In order to assure optimal protection of the product, it must be worn always buttoned up, kept clean and do not restrict visibility of the product through covering. Visibility of the product can be reduced in the case of improper cleaning or modification of the product. The product permanently discoloured or permanently soiled must be replaced. While wearing, the reflective belts must be on the outside. If the product is worn together with other means of personal protection, total protection features must be guaranteed depending on the purpose. In any case the requirements take precedence. Before using, the user checks on his/her own responsibility, whether the product is suitable for working activities, is complete, clean, not faded, and whether all functions are guaranteed. Check the damages, whether they could have a negative impact on the safety functions (e.g. cracks, holes, ripped seams, broken straps, worn reflective belts). If there is such a negative impact, before using, restore the original valid status of the product (to do this, contact the manufacturer or the authorised representative of the manufacturer), and if this is not possible, replace it. 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 sensitive persons test the product or seek for medical advice before use.

Size: The product should be of sufficient size, which must be adjusted before starting operation. 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 tables available on rawpol.com.

Cleaning, maintenance and disinfection: Recommendations for maintenance, cleaning are provided on the label of the product. It is recommended to use generally commercially available cleaners, preservatives for each type of material, which does not have negative impact on the user's body. It is not recommended to use any additional methods for disinfection and disinfectants, as this may have impact on reducing levels of protection.

The pictograms for maintenance, cleaning with an explanation:

☒ - maximum washing temperature 40°C, normal process, ☒ - do not bleach, ☒ - do not tumble dry, ☒ - do not iron, ☒ - do not dry clean, max 25 x - maximum number of cleaning cycles

The specified maximum number of cleaning cycles is not the only factor affecting shelf life of the clothing. The shelf life is also dependent on using, storage, etc.

Storage: The product should be stored at the appropriate temperature. In dry and well ventilated place. 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.

Type of packaging: It is recommended to distribute (including transport) the product in the package with cardboard or plastic film. 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. Consider 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 which cannot be repaired without decreasing its protective level. Occurrence of mechanical damages means that the product should be repaired or immediately withdrawn from use. With proper warehousing the storage time of the product can be up to 4 years from the date of production.

Date of manufacture is indicated on the packaging or the product. This is with the batch number, e.g. 290.120.191.234; explanation: the third and fourth digits indicate month of manufacturing, and the subsequent four digits identify year of the product. The digits together with the above identify the number of batch.

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

In the event that the 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.C2RRRC.104, where B.C2RRRC is the identifier of product group and 104 the subsequent version number. If the labels explained herein are not the same as labels on the product or on the packaging, this means that the manual is for other batch or other product. It is essential to verify having current/appropriate manual for the possessed product. If the manual is out-of-date or inappropriate to the batch, 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 safety expert, the manufacturer or the authorized representative of the manufacturer in order to explain them.

Explanation of used symbols: CODE – commodity product code; NUMBER – number of the article; SIZES – available range of sizes; COLOURS – available range of colors; PACKING – quantity of products in the smallest packaging/quantity in a cardboard box packaging; STANDARDS – standards; – batch code; – date of manufacture; (res) – manufacturer's identification mark; – make acquainted with the instructions for use; – online instruction; – conformity mark; – conformity sign of the Customs Union; – ukrainian conformity mark; – the graphic symbol indicating the planned use of the protective clothing of the protective clothing equipment with high visibility and the number indicating the class of the protective clothing are in accordance with EN ISO 20471:2013+A1:2016, – pictogram for resistance to water penetration, water vapour resistance and optional readymade garment in accordance with EN 343:2019; 4 - resistance to water penetration class (range 1-4); 1 - water vapour resistance class (range 1-4); X - readymade garment rain tower test, X is indicate that the garment has not been tested; (B) 0,361 m²/W – a graphic sign indicating cold protection and the appropriate requirement levels according to EN 342:2017; I_{cl,eff} (B) 0,361 m²/W - resultant effective thermal insulation in m²/K/W, 3 - air permeability class (range 1-3), class 3 material layers of a garment are appropriate for high air velocities, higher or equal to 5 m/s, WP - water penetration. X - it indicates that the garment has not been tested.

This manual is an integral part of the package, and at the same time its marking. In accordance with the Regulation (EU) 2016/425 of the European Parliament and of the Council article 17 paragraph 1, all the markings may not be placed on the product. The signs description in the instruction is binding information, also in the case if there were factors that led to that the signs on the product are unreadable. Any non-explained signs in this manual do not refer directly or indirectly to health and safety. The product and its packaging must be disposed in accordance with applicable local regulations. Information on the composition of the product and its packaging is available on rawpol.com.

DE ANLEITUNG UND INFORMATIONEN FÜR DIE BENUTZER

Hersteller: RAW-POL, Stefania S.K.A., Julianów 50, 96-200 Julianów, Polen.

Dieses Produkt gehört zur persönlichen Schutzausrüstung (PSA), die in der Verordnung (EU) 2016/425 Des Europäischen Parlaments und des Rates und erfüllt die Anforderungen dieser Verordnung. Es wurde der Kategorie II zugeordnet.

Standards: EN ISO 20471:2013+A1:2016 „Hochsichtbare Workkleidung. Prüfverfahren und Anforderungen”; EN 343:2019 „Schutzbekleidung. Schutz gegen Regen”; EN 342:2017 „Schutzbekleidung. Kleidungsstücke und Kleidungsstücke zum Schutz gegen Kälte”; EN ISO 13688:2013+A1:2021 „Schutzbekleidung. Allgemeine Anforderungen.”

Notifizierte Stelle: SGS Fimko Ltd, Takomatie 8, FI-00380 Helsinki, Finland, Nummer der Stelle: 0598.

Produkt/Beschreibung: Schutzbekleidung mit intensiver Sichtbarkeit - gefütterte Schutzjacke. Zusammensetzung: Beschichtung: 100% Polyester mit Polyurethan-Beschichtung; Polsterung: 100% Polyester; Futter: 100% Polyester. Die detaillierte Produktspezifikation ist auf der Website rawpol.com zu entnehmen.

Zweckbestimmung: Die Kleidung mit intensiver Sichtbarkeit ist zur Sicherstellung einer erhöhten Sichtbarkeit des Nutzers unter allen Lichtbedingungen vorgesehen, wenn sich dieser in der Sichtfeldreichweite der Bediener von Fahrzeugen oder anderer mechanisierter Ausrüstung bei Tageslicht und in der Dunkelheit bei Fahrzeugüberwachung befindet. Kleidung schützt auch vor Gefahren wie: atmosphärischer Niederschlag (z.B. Regen, Schnee), Nebel und hohe Luftfeuchtigkeit und kalte Temperatur von -5°C oder niedriger. Diese Effekte umfassen nicht nur niedrige Lufttemperaturen, sondern auch Luftfeuchtigkeit und Luftschwindigkeit (unter Einhaltung der Empfehlungen der Luftdurchlassfähigkeitsklasse). Das Kleidungsstück soll vor dem Eindringen von Wasser schützen. Die Arbeitszeit hängt von vielen Faktoren ab, wie z.B. der Windenergie oder den individuellen Eigenschaften eines Benutzers oder der Arbeitsumgebung. Daher sollten alle diese Faktoren bei der Beurteilung einer bestimmten Arbeitsumgebung berücksichtigt werden. Weitere Informationen über die Bedingungen, unter denen die Tests durchgeführt wurden, sind auf der Website rawpol.com oder direkt beim Hersteller, einem autorisierten Vertreter des Herstellers oder einem autorisierten Händler. Das Schutzniveau wurde auf der Grundlage von Tests erreicht, die gemäß den Bedingungen durchgeführt wurden, die in den Normen/Spezifikationen, auf die sie sich beziehen, beschrieben sind. Das Produkt bietet Schutz vor den oben genannten Risiken und ist für den Einsatz in der Umgebung bestimmt, in der es auftritt. Bitte führen Sie in einer gegebenen Arbeitsumgebung immer eine Risikobewertung durch, um zu überprüfen, ob das Produkt Schutz gegen alle in dieser Umgebung verfügbaren Risiken bietet. Das Produkt wird vorgesehen getragen werden (siehe Liste unten). Die Werte in der folgenden Tabelle beziehen sich auf Bedingungen, bei denen die Lufttemperatur der durchschnittlichen Strahlungstemperatur gleicht, die relative Luftfeuchtigkeit etwa 50 %, die Luftbewegungsgeschwindigkeit 0,4 m/s bzw. 3 m/s, die Luftdurchlassfähigkeit 50 mm/s und die Bewegungsgeschwindigkeit 1 m/s beträgt. Höhere Luftbewegungsgeschwindigkeiten führen aufgrund der durch die Luftbewegung verursachten Kühleffekte zu höheren Temperaturen im Inventar (siehe EN ISO 11079). Aufmerksamkeiten! Es ist möglich, dass die entsprechende Isolierung des gesamten Körpers nicht ausreicht, um eine Unterbekleidung empfindlicher Körperteile (z.B. Hände, Füße, Gesicht) und die damit verbundene Gefahr von Erfrierungen zu vermeiden. Der Handschutz gegen Kälte wird in der EN 511 behandelt.

Resultierende effektive Wärmedämmung der Kleidung I_{cl,eff} und die Bedingungen der Umgebungstemperatur zur Aufrechterhaltung der Wärmebilanz bei unterschiedlichen Einwirkzeiten

Isolierfähigkeit	Benutzer im Stehen, 75 W/m ²							
------------------	---	--	--	--	--	--	--	--

Isolierfähigkeit I _{cl,eff} m ² · K/W	Aktivität des Benutzers							
	leichte 115 W/m ²				mäßige 170 W/m ²			
	0.4 m/s		3 m/s		0.4 m/s		3 m/s	
	8 h	1 h	8 h	1 h	8 h	1 h	8 h	1 h
0.265	3	-12	9	-3	-12	-28	-2	-16
0.310	-2	-18	6	-8	-18	-36	-7	-22
0.390	-9	-28	0	-16	-29	-49	-16	-33
0.470	-17	-38	-6	-24	-40	-60	-24	-43
0.540	-24	-45	-11	-30	-49	-71	-32	-52
0.620	-31	-55	-17	-38	-60	-84	-40	-61

Podane wartości temperatury obowiązują jedynie pod warunkiem równomiernego rozłożenia izolacyjności na ciele i przy odpowiednim okryciu ciała, stóp i głowy. Podczas ciągłej ekspozycji na zimno zaleca się ukończenie ponocia, ponieważ absorpcja wilgoci stopniowo zmniejsza izolacyjność.

OSTRZEŻENIE – Ograniczony czas noszenia zgodnie z następującą tabelą:

Temperatura środowiska pracy	25°C	20°C	15°C	10°C	5°C
Czas noszenia (min)	60	75	100	240	-

Niniejsza tabela obowiązuje dla średniego obciążenia fizjologicznego M = 150 W/m² standardowego użytkownika, przy wilgotności względnej 50% i prędkości wiatru v₁ = 0.5 m/s.

Zalecany maksymalny czas ciągłego noszenia (min) dla kompletnego ubioru składającego się z kurtki i spodni bez dodatkowej podszewki izolującej ciepłotę.

	Klasa							
	1		2		3		4	
Temperatura środowiska pracy	R _{cl} > 40		25 < R _{cl} ≤ 40		15 < R _{cl} ≤ 25		R _{cl} ≤ 15	
°C	m ² Pa/W		m ² Pa/W		m ² Pa/W		m ² Pa/W	
25	60		105		180		-	
20	75		250		-		-	
15	100		-		-		-	
10	240		-		-		-	
5	-		-		-		-	

„-“ oznacza brak limitu czasu noszenia

Niniejsza tabela obowiązuje dla średniego obciążenia fizjologicznego M = 150 W/m² standardowego użytkownika, przy wilgotności względnej 50% i prędkości wiatru v₁ = 0.5 m/s.

Czas noszenia można wydłużyć dzięki efektywnym otworom wentylacyjnym i/lub przewodowi w noszeniu.

Informacja dotycząca narażenia na ryzyko z uwzględnieniem klas wyrobu oraz czynników związanych z poziomem ryzyka zgodnie

