

Product: “LUTON”, a protective winter jacket with high visibility




Intended use: The jacket is worn as top clothes - they are highly visible and must not be covered by other clothes or accessories.

The user wearing the jacket is well visible in dangerous situations during a day under any lighting conditions and also when it gets dark and the person is illuminated by a vehicle. These clothes should be worn by everyone who is exposed to such situation. They may substantially reduce any risk of accident. The examples of activities may include works carried out on roads, maintenance of tracks, rehabilitation of contaminated areas, emergency and ambulance service, transport, post services, security agencies, handling works in areas with moving vehicles etc.

Upper material of the jacket is provided with water-resistant surface coating protecting against adverse weather conditions, e.g. rain, snow, fog, and ground moist. In addition to that, the jacket protects its user against cold.

Selection of the right reflective occupational clothes with high visibility in accordance with the respective class must be carried out according to specific needs of the respective workplace, type of risk, and concrete conditions of the respective workplace. The right selection is within competence of an employer, who must determine and select the right type of clothes before they are used.

Pictograms: Performed tests

	X (1-3) max 30x	EN ISO 20471:2013 Class X – the number next to the graphic symbol stands for the clothing class based on the surface of high-visible materials. For the classes of individual structures and sizes see the table below. Maximum number of washing cycles after which the jacket preserves its high-visibility properties.
	3 1 “limited period of wear”	EN 343+A1:2007 Class 3 – resistance to penetration of water W_p . Class 1 – resistance to penetration of water vapour R_{et} “limited period of wear”, for the recommended period of wear see the table.
	3 X X X X	EN 14058:2004 Temperature resistance class R_{ct} Permeability class AP Water penetration class WP Insulation value I_{cler} Insulation value I_{cle} <i>Using X instead of a number means that the clothing was not tested for this purpose.</i>

EN ISO 20471 - minimum required area of conspicuous material in m²

	Clothes of class 3	Clothes of class 2	Clothes of class 1
Underlying material	0,80	0,50	0,14
Retroreflective material	0,20	0,13	0,10

Classes of clothing:

Structure	Clothing class in accordance with EN ISO 20471	Clothing class in accordance with EN 343+A1	Clothing class in accordance with EN 14058
Jacket – size XS and S	2	W_p : 3 R_{et} :1	R_{et} : 3
Jacket – size M, L, and larger	3		
Vest – size XS, S, and M	1	-	R_{et} : 3
Vest – size L and larger	2		

EN 343+A1: Recommended period of wear:

The following table provides information that clarify impact of penetrability for water vapour (R_{et}) for recommended uninterrupted period of wearing the clothes at various temperatures.

The maximum recommended uninterrupted period of wearing of the complete set of clothes consisting of jacket and trousers without insulating lining.

Work environment temperature in °C	Class			The table applies for medium physical load, $M = 150 \text{ W/m}^2$, for a standard person, relative air humidity 50%, and wind speed (airflow) $v_a = 0,5 \text{ m/s}$.
	1 R_{et} above 40 min.	2 $20 < R_{et} \leq 40 \text{ min.}$	3 $R_{et} \leq 20 \text{ min.}$	
25	60	105	205	
20	75	250	—	
15	100	—	—	
10	240	—	—	
5	—	—	—	

„—“ means: unlimited period of wear

EN 14058

The protective value of measured efficient thermal insulation of clothing is a combination of the ambient atmosphere temperature and extent of activities (heat production by metabolism). Heat-insulation properties of the clothing depends on the respective use of the clothing at various conditions.

Adequate level of insulation of the whole body is not sufficient to prevent chilling of perceived parts of body (e.g. hands, legs, face) and related risk of frostbite.

Thermal insulation can worsen after each cleaning procedure.



The clothes conform to the basic hygienic and safety requirements in accordance with the Regulation (EU) 2016/425 and other standards mentioned in this document. Personal protective clothes of II. class.

EN ISO 13688:2013

EN ISO 20471:2013/A1:2017/Opr.1:2015 (EN ISO 20471:2013/A1:2016)

EN 343+A1:2008/Opr.1:2010 (EN343:2003+A1:2007/AC:2009-11)

EN 14058:2004

Identification of the Notified Body that carried out the conformity assessment: Institut pro testování a certifikaci, a.s. (Institute for testing and certification), tř. T. Bati 299, 764 21 Zlín-Louky, CZ, Notified body no. 1023.

Restricted use: To provide the right protection level, as specified above, the clothes must be always worn buttoned up. The clothes must not come into contact with liquid chemicals, particularly with dissolving agents and fire. It is also necessary to avoid excessive mechanical damage, particularly retro-reflective parts (tearing, braking off etc.).

Transportation, packaging type: The products are packed in PE bags. The products must not be damaged during their transportation.

Storage: Do not store in places with direct sun. Store the clothes in closed, dry, well ventilated stores. Protect them against radiant heat of heating devices. They must be stored not closer than 1 m at least from heating bodies. If the clothes are wet, leave them to dry out at room temperature and then store them.

Material: upper material: 100% polyester Oxford 300D x 300D with polyurethane (PU) coating, filling and lining: 100% polyester.

Reflective strips: TM9 – 100% polyester coated with silver retroreflective colour.

Sizes: Sizes corresponding to the prescribed intervals in accordance with EN ISO 13688:2013.

The clothes are manufactured in the standard height 170-182cm. Permitted tolerance of deviations in dimensions is +4 and -3%.

Maintenance and cleaning:

The user finds the product maintenance symbols on sewn-on label.



How to maintain at home: Not more than 30 washing cycles; washing as a synthetic material with max. temperature

of 40 °C; do not use any BIO laundry detergents and agents containing optical brighteners. Do not use softeners; considerate handling; rinsing in cold water; short spinning; no bleaching; no tumble drying; no ironing; no chemical cleaning.

Manual cleaning of reflective strips:

1. Water 40 °C – soft cloth, sponge or soft brush.
2. Considerate laundry detergent or cleaning agent.
3. Rinse the clothes after cleaning and leave them to get dried.

The maximum number of washing cycles applies only for the properties related to high visibility.

Warning:

- Check the clothes' condition visually before every use. The clothes must be kept clean to remain functional. If they are dirty or pale, replace them immediately!!!
- If integrity of the clothing becomes disrupted (rupture, wearing out, material excessive thinning, unstitched seams etc.), the degree of protection is lower and the product becomes inconvenient in accordance with above specified legal and technical regulations.
- Repair them only using the materials and fabrics that meet the requirements of the respective standard.
- The protection class is determined based on the area of visible material; therefore marking of the clothes on their surface is restricted or limited.
- Red fluorescent colour is turning fluorescent orange-red colour as a result of exposure to light.
- If the product is used, kept, or treated differently than as specified here in this document, it may be destroyed or its functions may be changed.
- The above-specified maximum number of washing cycles is not the only factor related to the life of the clothes. The clothes' life will depend on their using, storing etc.
- Wearing the hood may impair sharpness of hearing and peripheral vision.
- The vest does not protect its user against adverse weather (e.g. rain, snow, fog, and ground moisture).
- No high-visibility clothing can guarantee absolute visibility in every situation.

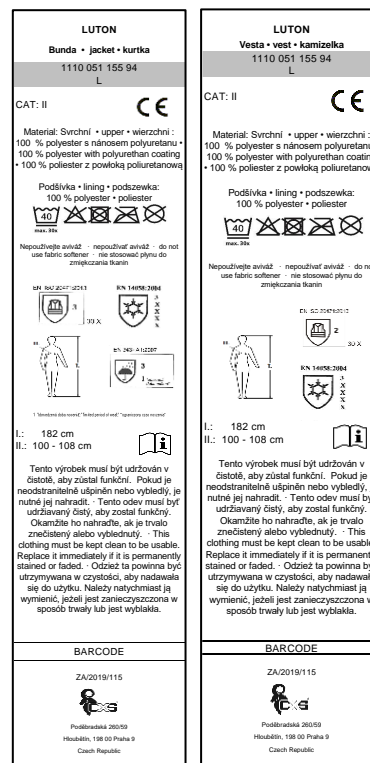
If the clothing is used when strictly following the specified purpose, then there are no hazards that could endanger the user's health (the product must not be used in the circumstances that require other types of protective functions, e.g. protection against heat hazards, clothing caught by moving parts of a machine etc.).

Disposal: Disposal of clothes is regulated by legislation of individual countries or by local regulations. Disposal by burning.

The Declaration of Conformity can be found here: www.canis.cz; for individual products, in the bar "Documents to download".

Marking: Sewed-in label (sample)

- type of product
- category of product
- conformity mark
- material composition
- pictograms for maintenance in accordance with EN ISO 3758:2012
- marking of size with 2 control sizes;
- pictograms for protection including harmonized standards
- notice on the necessity to read the instructions for use
- identification of manufacturer
- Lot



If you have any questions, contact the manufacturer:



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