REPUBLIC OF BULGARIA
Executive agency
Bulgarian accreditation service

Signatory to the EA Multilateral Agreement in this field

ORDER

№ А 77

Sofia, 06.03.2025

Pursuant to Art. 10, para 1, item 2a of the Law on National Accreditation of Conformity Assessment Bodies, in connection with item 4.3.8 f) of the BAS QR 2 Accreditation Procedure, assessment report reg. № 313/33 ЛИ/4/В/07.02.2025 and EA BAS order, reg. № А 76/06.03.2025, I hereby

AMEND

Certificate of accreditation reg. № 33 ЛИ/28.05.2024 and its enclosure,
EA BAS order reg. № А 189/28.05.2024

DEFENSE INSTITUTE PROFESSOR TSVETAN LAZAROV
CENTRAL TESTING LABORATORY OF LOGISTIC PROPERTIES

Management and laboratory address: 1592 Sofia, 2 Prof. Tsvetan Lazarov Blvd.

To perform testing of:

Type of the scope: *flexible for a part of the scope*

№	Tested products	Type of test/characteristic	Test methods (standard/ validated method)
1	2	3	4
1.	**TEXTILE**		
1.1.	Yarn Yarns and threads	1.1.1. Quantitative composition *	OLNTP Annex №5, Section II: REU №1007/2011, annex VIII, chapter 2 БДС EN ISO 1833-1
		- acetate / certain other fibers	OLNTP Method 1 (with acetone) REU №1007/2011-method 1 (with acetone) БДС EN ISO 1833-3
		- certain protein fibers / certain other fibers	OLNTP Method 2 (with hypochlorite) REU №1007/2011-method 2 (with hypochlorite) БДС EN ISO 1833-4
		- viscose, cupro or certain types of modal / cotton	OLNTP Method 3 (with formic acid and zinc chloride) REU №1007/2011-method 3 (with formic acid and zinc chloride) БДС EN ISO 1833-6
		- polyamide, nylon / certain other fibers	OLNTP Method 4 (with formic acid)

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Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
			REU №1007/2011-method 4 (with formic acid) БДС EN ISO 1833-7
		- acetate / certain other fibers	OLNTP Method 5 (with benzyl alcohol) REU №1007/2011-method 5 (with benzyl alcohol) БДС EN ISO 1833-9
		- triacetate / certain other fibers	OLNTP Method 6 (with dichloromethane) REU №1007/2011-method 6 (with dichloromethane) БДС EN ISO 1833-10
		- certain cellulose fibers / certain other fibers	OLNTP Method 7 (with sulphuric acid) REU №1007/2011-method 7 (with sulphuric acid) БДС EN ISO 1833-11
		- acrylics, certain modacrylics, certain chlorofibres / certain other fibers	OLNTP Method 8 (with dimethylformamide) REU №1007/2011-method 8 (with dimethylformamide) БДС EN ISO 1833-12
		- acetate / certain other fibers	OLNTP Method 10 (with acetic acid) REU №1007/2011-method 10 (with acetic acid) БДС EN ISO 1833-14
		- silk / certain other fibers	OLNTP Method 11 (with sulphuric acid) REU №1007/2011-method 11 (with sulphuric acid) БДС EN ISO 1833-18
		- polypropylene fibers /certain other fibers	OLNTP Method 13 (with xylol) REU №1007/2011-method 13 (with xylol) БДС EN ISO 1833-16
		- chlorofibers / certain other fibers	OLNTP Method 14 (with concentrated sulphuric acid) REU №1007/2011-method 14 (with concentrated sulphuric acid) БДС EN ISO 1833-17
		- three-component fibre mixtures	OLNTP Annex №6: Methods based on Annex №5, Section II REU №1007/2011, annex VIII, chapter 3, methods based on annex VIII, chapter 2 БДС EN ISO 1833-2
		1.1.2 Linear density	БДС EN ISO 2060
		1.1.3 Breaking force	БДС EN ISO 2062

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		1.1.4 Elongation at break	БДС EN ISO 2062
		1.1.5 Color fastness to laundering	БДС EN ISO 105-C06 БДС EN 20105-A02
		1.1.6 Color fastness to rubbing: - dry - wet	БДС EN ISO 105-X12 БДС EN 20105-A02
		1.1.7 Color fastness to water	БДС EN ISO 105-E01 БДС EN 20105-A02
		1.1.8 Color fastness to dry cleaning	БДС EN ISO 105-D01 БДС EN 20105-A02
1.2.	Fabrics	1.2.1. Quantitative composition *	OLNTP Annex №5, Section II: REU №1007/2011, annex VIII, chapter 2 БДС EN ISO 1833-1
		- acetate / certain other fibers	OLNTP Method 1 (with acetone) REU №1007/2011-method 1 (with acetone) БДС EN ISO 1833-3
		- certain protein fibers / certain other fibers	OLNTP Method 2 (with hypochlorite) REU №1007/2011-method 2 (with hypochlorite) БДС EN ISO 1833-4
		- viscose, cupro or certain types of modal / cotton	OLNTP Method 3 (with formic acid and zinc chloride) REU №1007/2011-method 3 (with formic acid and zinc chloride) БДС EN ISO 1833-6
		- polyamide, nylon / certain other fibers	OLNTP Method 4 (with formic acid) REU №1007/2011-method 4 (with formic acid) БДС EN ISO 1833-7
		- acetate / certain other fibers	OLNTP Method 5 (with benzyl alcohol) REU №1007/2011-method 5 (with benzyl alcohol) БДС EN ISO 1833-9
		- triacetate / certain other fibers	OLNTP Method 6 (with dichloromethane) REU №1007/2011-method 6 (with dichloromethane) БДС EN ISO 1833-10
		- certain cellulose fibers / certain other fibers	OLNTP Method 7 (with sulphuric acid) REU №1007/2011-method 7 (with sulphuric acid) БДС EN ISO 1833-11
		- acrylics, certain modacrylics, certain	OLNTP Method 8 (with dimethylformamide)

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		chlorofibres / certain other fibers	REU №1007/2011-method 8 (with dimethylformamide) БДС EN ISO 1833-12
		- acetate / certain other fibers	OLNTP Method 10 (with acetic acid) REU №1007/2011-method 10 (with acetic acid) БДС EN ISO 1833-14
		- silk / certain other fibers	OLNTP Method 11 (with sulphuric acid) REU №1007/2011-method 11 (with sulphuric acid) БДС EN ISO 1833-18
		- polypropylene fibers /certain other fibers	OLNTP Method 13 (with xylol) REU №1007/2011-method 13 (with xylol) БДС EN ISO 1833-16
		- chlorofibers / certain other fibers	OLNTP Method 14 (with concentrated sulphuric acid) REU №1007/2011-method 14 (with concentrated sulphuric acid) БДС EN ISO 1833-17
		- three-component fibre mixtures	OLNTP Annex №6: Methods based on Annex №5, Section II REU №1007/2011, annex VIII, chapter 3, methods based on annex VIII, chapter 2 БДС EN ISO 1833-2
		1.2.2 Width and length	БДС EN 1773
		1.2.3 Number of threads per unit length - warp - weft	БДС EN ISO 7211-2
		1.2.4 Maximum force - warp - weft	БДС EN ISO 13934-1
		1.2.5 Elongation at maximum force - warp - weft	БДС EN ISO 13934-1
		1.2.6 Tear force of test specimens - warp - weft	БДС EN ISO 13937-2 БДС EN ISO 13937-4
		1.2.7 Dimensional change induced by water immersion and drying: - warp - weft	БДС EN ISO 3759 БДС ISO 7771

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		1.2.8 Dimensional change induced by laundering and drying: - warp - weft	БДС EN ISO 3759 БДС EN ISO 5077 БДС EN ISO 6330
		1.2.9 Abrasion resistance - specimen breakdown - mass loss - assessment of appearance change	БДС EN ISO 12947-1 БДС EN ISO 12947-1/AC БДС EN ISO 12947-2 БДС EN ISO 12947-3 БДС EN ISO 12947-3/AC БДС EN ISO 12947-4
		1.2.10 Propensity to surface pilling	БДС EN ISO 12945-2
		1.2.11 Mass per unit of area	БДС EN 12127
		1.2.12 Weave	БДС 12674
		1.2.13 pH of aqueous extract	БДС EN ISO 3071
		1.2.14 Formaldehyde content	БДС EN ISO 14184-1
		1.2.15 Color fastness to laundering	БДС EN ISO 105-C06 БДС EN 20105-A02
		1.2.16 Color fastness to rubbing: - dry - wet	БДС EN ISO 105-X12 БДС EN 20105-A02
		1.2.17 Color fastness to dry cleaning	БДС EN ISO 105-D01 БДС EN 20105-A02
		1.2.18 Color fastness to water	БДС EN ISO 105-E01 БДС EN 20105-A02
		1.2.19 Color fastness to sea water	БДС EN ISO 105-E02 БДС EN 20105-A02
		1.2.20 Color fastness to perspiration: - acidic - alkaline	БДС EN ISO 105-E04 БДС EN 20105-A02
		1.2.21 Color fastness to spotting: Acid	БДС EN ISO 105-E05 БДС EN 20105-A02
		1.2.22 Color fastness to spotting: Alkali	БДС EN ISO 105-E06 БДС EN 20105-A02
		1.2.23 Color fastness to hot pressing	БДС EN ISO 105-X11 БДС EN 20105-A02
		1.2.24 Resistance to water penetration	БДС EN ISO 811
		1.2.25 Resistance to surface wetting of fabrics	БДС EN ISO 4920
		1.2.26 Hygroscopicity /moisture absorption/	БДС 12006
		1.2.27 Capillarity	БДС 10298
		1.2.28. Angle of recovery from creasing	БДС EN ISO 2313-1

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		- warp-front/front; back/back-weft-front/front; back/back	
1.3.	Nonwovens	1.3.1. Quantitative composition *	OLNTP Annex №5, Section II: REU №1007/2011, annex VIII, chapter 2 БДС EN ISO 1833-1
		- acetate / certain other fibers	OLNTP Method 1 (with acetone) REU №1007/2011-method 1 (with acetone) БДС EN ISO 1833-3
		- certain protein fibers / certain other fibers	OLNTP Method 2 (with hypochlorite) REU №1007/2011-method 2 (with hypochlorite) БДС EN ISO 1833-4
		- viscose, cupro or certain types of modal / cotton	OLNTP Method 3 (with formic acid and zinc chloride) REU №1007/2011-method 3 (with formic acid and zinc chloride) БДС EN ISO 1833-6
		- polyamide, nylon / certain other fibers	OLNTP Method 4 (with formic acid) REU №1007/2011-method 4 (with formic acid) БДС EN ISO 1833-7
		- acetate / certain other fibers	OLNTP Method 5 (with benzyl alcohol) REU №1007/2011-method 5 (with benzyl alcohol) БДС EN ISO 1833-9
		- triacetate / certain other fibers	OLNTP Method 6 (with dichloromethane) REU №1007/2011-method 6 (with dichloromethane) БДС EN ISO 1833-10
		- certain cellulose fibers / certain other fibers	OLNTP Method 7 (with sulphuric acid) REU №1007/2011-method 7 (with sulphuric acid) БДС EN ISO 1833-11
		- acrylics, certain modacrylics, certain chlorofibres / certain other fibers	OLNTP Method 8 (with dimethylformamide) REU №1007/2011-method 8 (with dimethylformamide) БДС EN ISO 1833-12
		- acetate / certain other fibers	OLNTP Method 10 (with acetic acid) REU №1007/2011-method 10 (with acetic acid)

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
			БДС EN ISO 1833-14
		- silk / certain other fibers	OLNTP Method 11 (with sulphuric acid) REU №1007/2011-method 11 (with sulphuric acid) БДС EN ISO 1833-18
		- polypropylene fibers /certain other fibers	OLNTP Method 13 (with xylol) REU №1007/2011-method 13 (with xylol) БДС EN ISO 1833-16
		- chlorofibers / certain other fibers	OLNTP Method 14 (with concentrated sulphuric acid) REU №1007/2011-method 14 (with concentrated sulphuric acid) БДС EN ISO 1833-17
		- three-component fibre mixtures	OLNTP Annex №6: Methods based on Annex №5, Section II REU №1007/2011, annex VIII, chapter 3, methods based on annex VIII, chapter 2 БДС EN ISO 1833-2
		1.3.2 Mass per unit of area	БДС EN ISO 9073-1
		1.3.3 *pH* of aqueous extract	БДС EN ISO 3071
		1.3.4 Formaldehyde content	БДС EN ISO 14184-1
1.4.	Knitted fabrics	1.4.1. Quantitative composition*	OLNTP, Annex №5, Section II: REU №1007/2011, annex VIII, chapter 2 БДС EN ISO 1833-1
		- acetate / certain other fibers	OLNTP Method 1 (with acetone) REU №1007/2011-method 1 (with acetone) БДС EN ISO 1833-3
		- certain protein fibers / certain other fibers	OLNTP Method 2 (with hypochlorite) REU №1007/2011-method 2 (with hypochlorite) БДС EN ISO 1833-4
		- viscose, cupro or certain types of modal / cotton	OLNTP Method 3 (with formic acid and zinc chloride) REU №1007/2011-method 3 (with formic acid and zinc chloride) БДС EN ISO 1833-6
		- polyamide, nylon / certain other fibers	OLNTP Method 4 (with formic acid) REU №1007/2011-method 4 (with formic acid) БДС EN ISO 1833-7

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		- acetate / certain other fibers	OLNTP Method 5 (with benzyl alcohol) REU №1007/2011-method 5 (with benzyl alcohol) БДС EN ISO 1833-9
		- triacetate / certain other fibers	OLNTP Method 6 (with dichloromethane) REU №1007/2011-method 6 (with dichloromethane) БДС EN ISO 1833-10
		- certain cellulose fibers / certain other fibers	OLNTP Method 7 (with sulphuric acid) REU №1007/2011-method 7 (with sulphuric acid) БДС EN ISO 1833-11
		- acrylics, certain modacrylics, certain chlorofibres / certain other fibers	OLNTP Method 8 (with dimethylformamide) REU №1007/2011-method 8 (with dimethylformamide) БДС EN ISO 1833-12
		- acetate / certain other fibers	OLNTP Method 10 (with acetic acid) REU №1007/2011-method 10 (with acetic acid) БДС EN ISO 1833-14
		- silk / certain other fibers	OLNTP Method 11 (with sulphuric acid) REU №1007/2011-method 11 (with sulphuric acid) БДС EN ISO 1833-18
		- polypropylene fibers /certain other fibers	OLNTP Method 13 (with xylol) REU №1007/2011-method 13 (with xylol) БДС EN ISO 1833-16
		- chlorofibers / certain other fibers	OLNTP Method 14 (with concentrated sulphuric acid) REU №1007/2011-method 14 (with concentrated sulphuric acid) БДС EN ISO 1833-17
		- three-component fibre mixtures	OLNTP Annex №6: Methods based on Annex №5, Section II REU №1007/2011, annex VIII, chapter 3, methods based on annex VIII, chapter 2 БДС EN ISO 1833-2
		1.4.2 Mass per unit of area	БДС EN 12127
		1.4.3 Pellet piercing strength	БДС 9585
		1.4.4 Dimensional change induced by water immersion and drying:	БДС EN ISO 3759 БДС ISO 7771

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		- wales - courses	
		1.4.5 Dimensional change induced by laundering and drying: - wales - courses	БДС EN ISO 3759 БДС EN ISO 5077 БДС EN ISO 6330
		1.4.6 Abrasion resistance - specimen breakdown - mass loss - assessment of appearance change	БДС EN ISO 12947-1 БДС EN ISO 12947-1/AC БДС EN ISO 12947-2 БДС EN ISO 12947-3 БДС EN ISO 12947-3/AC БДС EN ISO 12947-4
		1.4.7 Propensity to surface pilling	БДС EN ISO 12945-2
		1.4.8 pH of aqueous extract	БДС EN ISO 3071
		1.4.9 Formaldehyde content	БДС EN ISO 14184-1
		1.4.10 Number of stitches per unit of length and unit area - wales - courses	БДС EN 14971
		1.4.11 Color fastness to laundering	БДС EN ISO 105-C06 БДС EN 20105-A02
		1.4.12 Color fastness to rubbing: - dry - wet	БДС EN ISO 105-X12 БДС EN 20105-A02
		1.4.13 Color fastness to dry cleaning	БДС EN ISO 105-D01 БДС EN 20105-A02
		1.4.14 Color fastness to water	БДС EN ISO 105-E01 БДС EN 20105-A02
		1.4.15 Color fastness to sea water	БДС EN ISO 105-E02 БДС EN 20105-A02
		1.4.16 Color fastness to perspiration: - acidic - alkaline	БДС EN ISO 105-E04 БДС EN 20105-A02
		1.4.17 Color fastness to hot pressing	БДС EN ISO 105-X11 БДС EN 20105-A02
1.5.	Finished products		
1.5.1.	Knitted products	1.5.1.1 Size designation	БДС 15409 БДС 13639
		1.5.1.2 Maximum force to seam rupture (seam strength)	БДС 13307
		1.5.1.3 Mass of a pair of sock articles	БДС 5512 cl. 2. 1.
1.5.2.	Sewing products	1.5.2.1 Size designation	БДС EN ISO 8559-1 БДС EN ISO 8559-2 БДС EN 13402-3 БДС EN 14

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		1.5.2.2 Maximum force to seam rupture (seam strength)	БДС EN ISO 13935-1
		1.5.2.3 Maximum force to peeling of backing details (unsticking strength)	БДС 12469
1.5.3.	Passementerie	1.5.3.1. Quantitative composition *	OLNTP Annex №5, Section II: REU №1007/2011, annex VIII, chapter 2 БДС EN ISO 1833-1
		- acetate / certain other fibers	OLNTP Method 1 (with acetone) REU №1007/2011-method 1 (with acetone) БДС EN ISO 1833-3
		- certain protein fibers / certain other fibers	OLNTP Method 2 (with hypochlorite) REU №1007/2011-method 2 (with hypochlorite) БДС EN ISO 1833-4
		- viscose, cupro or certain types of modal / cotton	OLNTP Method 3 (with formic acid and zinc chloride) REU №1007/2011-method 3 (with formic acid and zinc chloride) БДС EN ISO 1833-6
		- polyamide, nylon / certain other fibers	OLNTP Method 4 (with formic acid) REU №1007/2011-method 4 (with formic acid) БДС EN ISO 1833-7
		- acetate / certain other fibers	OLNTP Method 5 (with benzyl alcohol) REU №1007/2011-method 5 (with benzyl alcohol) БДС EN ISO 1833-9
		- triacetate / certain other fibers	OLNTP Method 6 (with dichloromethane) REU №1007/2011-method 6 (with dichloromethane) БДС EN ISO 1833-10
		- certain cellulose fibers / certain other fibers	OLNTP Method 7 (with sulphuric acid) REU №1007/2011-method 7 (with sulphuric acid) БДС EN ISO 1833-11
		- acrylics, certain modacrylics, certain chlorofibres / certain other fibers	OLNTP Method 8 (with dimethylformamide) REU №1007/2011-method 8 (with dimethylformamide) БДС EN ISO 1833-12
		- acetate / certain other fibers	OLNTP Method 10 (with acetic acid)

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
			REU №1007/2011-method 10 (with acetic acid) БДС EN ISO 1833-14
		- silk / certain other fibers	OLNTP Method 11 (with sulphuric acid) REU №1007/2011-method 11 (with sulphuric acid) БДС EN ISO 1833-18
		- polypropylene fibers /certain other fibers	OLNTP Method 13 (with xylol) REU №1007/2011-method 13 (with xylol) БДС EN ISO 1833-16
		- chlorofibers / certain other fibers	OLNTP Method 14 (with concentrated sulphuric acid) REU №1007/2011-method 14 (with concentrated sulphuric acid) БДС EN ISO 1833-17
		- three-component fibre mixtures	OLNTP Annex №6: Methods based on Annex №5, Section II REU №1007/2011, annex VIII, chapter 3, methods based on annex VIII, chapter 2 БДС EN ISO 1833-2
		1.5.3.2 Width and length	БДС EN 1773
		1.5.3.3 Strength and elongation at break	БДС 12315
		1.5.3.4 Diameter	БДС 12315
		1.5.3.5 Linear mass	БДС 12315
		1.5.3.6 Color fastness to laundering	БДС EN ISO 105-C06 БДС EN 20105-A02
		1.5.3.7 Color fastness to rubbing: - dry - wet	БДС EN ISO 105-X12 БДС EN 20105-A02
		1.5.3.8 Color fastness to dry cleaning	БДС EN ISO 105-D01 БДС EN 20105-A02
		1.5.3.9 Color fastness to . water	БДС EN ISO 105-E01 БДС EN 20105-A02
		1.5.3.10 Color fastness to perspiration: - acidic - alkaline	БДС EN ISO 105 E04 БДС EN 20105 A02
1.6.	COLOR		
1.6.1	Textile materials (fabrics, nonwovens, knitted fabrics, finished products, passementerie)	1.6.1.1. Spectral coefficient of reflection, *R* (from 250 nm to 2000 nm)	DIN 5036-3
		1.6.1.2. Color coordinates (L*, a*, b*, C_{AB}*, h_{AB}; X, Y, Z; x, y)	БДС EN ISO 105-J01

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		1.6.1.3. CIELAB values, L*, a*, b*, C^*_{ab}, h_{ab}	БДС EN ISO 105-J03 cl.3.1
		1.6.1.4. Values of ΔL*, Δa*, Δb*, ΔC*ab, ΔHab, ΔEab	БДС EN ISO 105-J03 cl.3.2
		1.6.1.5 Color fastness for artificial light: Xenon arc lamp	БДС EN ISO 105-B02 БДС EN ISO 105-B04 БДС EN 20105-A02
1.7	Textile materials	1.7.1 Permeability to air	БДС EN ISO 9237
2.	**LEATHER**		
2.1	Flexible leather	2.1.1 Moisture	БДС EN ISO 4684
		2.1.2 Substances extractable with organic solvents	БДС EN ISO 4048 Method cl.8.2
		2.1.3 pH of aqueous extract	БДС EN ISO 4045
		2.1.4 Chromium(VI) content	БДС EN ISO 17075-1
		2.1.5 Water vapor permeability	БДС 6783 cl.8 БДС EN ISO 20344 cl. 6.6 БДС EN ISO 20344/A1 БДС EN ISO 14268
		2.1.6 Coefficient of water vapor permeability	БДС EN ISO 20344 pt 6.8 БДС EN ISO 20344/A1
		2.1.7 Absorption of water vapor	БДС EN ISO 20344 pt 6.7 БДС EN ISO 20344/A1
		2.1.8 Resistance to damage on lasting: - cracking of the front layer - tearing point	БДС EN ISO 17693
		2.1.9 Thickness	БДС EN ISO 2589
		2.1.10 Elongation at a specified load	БДС EN ISO 3376
		2.1.11 Tensile strength	БДС EN ISO 3376
		2.1.12 Elongation at break	БДС EN ISO 3376
		2.1.13 Tear load	БДС EN ISO 3377-1 БДС EN ISO 3377-2 БДС EN ISO 1769
		2.1.14 Maximum force to seam rupture	БДС 12789
		2.1.15 Time of penetration of the first water droplet	БДС EN ISO 5403-1
		2.1.16 Water absorption	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.1.17 Water permeability	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.1.18 Flex resistance	БДС EN ISO 5402-1 БДС EN ISO 17694
		2.1.19 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640 БДС EN ISO 17700
		2.1.20 Color fastness to water spotting	БДС EN ISO 15700
2.2	Heavy leather	2.2.1 Moisture	БДС EN ISO 4684

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		2.2.2 Substances extractable with organic solvents	БДС EN ISO 4048 Method cl.8.2
		2.2.3 Thickness	БДС EN ISO 2589
		2.2.4 Elongation at a specified load	БДС EN ISO 3376
		2.2.5 Tensile strength	БДС EN ISO 3376
		2.2.6 Elongation at break	БДС EN ISO 3376
		2.2.7 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640
		2.2.8 Chromium (VI) content	БДС EN ISO 17075-1
		2.2.9 Maximum force to seam rupture	БДС 12789
		2.2.10 *pH* of aqueous extract	БДС EN ISO 4045
2.3	Shoes (leather, textile, textile with coating and combinations thereof)		
2.3.1	Whole shoe	2.3.1.1 Resistance to separation upper/outsole: - adhesive method; - adhesive-sewing method; - direct molding method.	БДС EN ISO 20344 cl. 5.2 БДС EN ISO 20344/A1 БДС EN ISO 17708 БДС 10446 cl.2 БДС EN ISO 20344 cl. 5.2 БДС EN ISO 20344/A1 БДС EN ISO 17708
		2.3.1.2 Antistatic properties	БДС EN ISO 20344 cl. 5.13 БДС EN ISO 20344/A1
		2.3.1.3 Water resistance of whole shoe	VALMI – 01/2019 БДС EN ISO 20344 cl. 5.19 БДС EN ISO 20344/A1
		2.3.1.4 Seam strength	БДС EN ISO 17697 Method B
2.3.2	Upper	2.3.2.1 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2 БДС EN ISO 17696
		2.3.2.2 Flex resistance	БДС EN ISO 17694
		2.3.2.3 Time of penetration of the first water droplet	БДС EN ISO 5403-1
		2.3.2.4 Water absorption	БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1 БДС EN ISO 5403-1
		2.3.2.5 Water permeability	БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1 БДС EN ISO 5403-1
		2.3.2.6 Water vapor permeability	БДС 6783 cl.8 БДС EN ISO 20344 cl. 6.6 БДС EN ISO 20344/A1 БДС EN ISO 14268
		2.3.2.7 Coefficient of water vapor permeability	БДС EN ISO 20344 pt 6.8 БДС EN ISO 20344/A1
		2.3.2.8 *pH* of aqueous extract	БДС EN ISO 4045
		2.3.2.9 Chromium (VI) content	БДС EN ISO 17075-1
		2.3.2.10 Resistance to damage on lasting: - cracking of the front layer - tearing point	БДС EN ISO 17693

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		2.3.2.11 Tensile strength	БДС EN ISO 3376
		2.3.2.12 Elongation at break	БДС EN ISO 17706
		2.3.2.13 Thickness	БДС EN ISO 2589
		2.3.2.14 Elongation at a specified load	БДС EN ISO 3376
		2.3.2.15 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640 БДС EN ISO 17700
		2.3.2.16 Height of upper	БДС EN ISO 20344 cl.6.2 БДС EN ISO 20344/A1
2.3.3	Lining	2.3.3.1 pH of aqueous extract	БДС EN ISO 4045
		2.3.3.2 Chromium (VI) content	БДС EN ISO 17075-1
		2.3.3.3 Water vapor permeability	БДС 6783 cl.8 БДС EN ISO 20344 cl. 6.6 БДС EN ISO 20344/A1 БДС EN ISO 14268
		2.3.3.4 Coefficient of water vapor permeability	БДС EN ISO 20344 pt 6.8 БДС EN ISO 20344/A1
		2.3.3.5 Elongation at a specified load	БДС EN ISO 3376
		2.3.3.6 Tensile strength	БДС EN ISO 3376
		2.3.3.7 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640 БДС EN ISO 17700
		2.3.3.8 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2 БДС EN ISO 17696
2.3.4	Tongue	2.3.4.1 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2 БДС EN ISO 17696
		2.3.4.2 *pH* of aqueous extract	БДС EN ISO 4045
		2.3.4.3 Chromium (VI) content	БДС EN ISO 17075-1
2.3.5	Insole	2.3.5.1 Thickness	БДС EN ISO 2589 БДС EN ISO 20344 cl.7.1 БДС EN ISO 20344/A1
		2.3.5.2 Water absorption	БДС EN ISO 22649 Method A
		2.3.5.3 Water desorption	БДС EN ISO 22649 Method A
		2.3.5.4 Abrasion resistance	БДС EN 12747
2.3.6	Outsole	2.3.6.1 Tread surface	БДС EN ISO 20344 cl.8.2 БДС EN ISO 20344/A1
		2.3.6.2 Outsole thickness (excluding the tread)	БДС EN ISO 20344 cl.8.2 БДС EN ISO 20344/A1
		2.3.6.3 Tread height	БДС EN ISO 20344 cl.8.2 БДС EN ISO 20344/A1
		2.3.6.4 Abrasion resistance	БДС EN 12770 БДС ISO 4649
		2.3.6.5 Flexing resistance: - cut increase after 30 000 cycles - emergence of cracks	БДС EN ISO 20344 cl.8.6 БДС EN ISO 20344/A1 БДС EN ISO 17707 cl.7
		2.3.6.6 Shore hardness A	БДС ISO 48-4

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		2.3.6.7 Density of vulcanized or thermoplastic rubber	БДС ISO 2781 Method A
2.4.	Leather clothing		
2.4.1	Use-surface leather	2.4.1.1 Moisture	БДС EN ISO 4684
		2.4.1.2 Substances extractable with organic solvents	БДС EN ISO 4048 Method cl.8.2
		2.4.1.3 pH of aqueous extract	БДС EN ISO 4045
		2.4.1.4 Chromium (VI) content	БДС EN ISO 17075-1
		2.4.1.5 Time of penetration of the first water droplet	БДС EN ISO 5403-1
		2.4.1.6 Water absorption	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.4.1.7 Water permeability	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.4.1.8 Thickness	БДС EN ISO 2589
		2.4.1.9 Tensile strength	БДС EN ISO 3376
		2.4.1.10 Elongation at a specified load	БДС EN ISO 3376
		2.4.1.11 Maximum force to seam rupture	БДС 12789
		2.4.1.12 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640
		2.4.1.13 Color fastness to water spotting	БДС EN ISO 15700
		2.4.1.14 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2
2.4.2	Fur	2.4.2.1 pH of aqueous extract	БДС EN ISO 4045
		2.4.2.2 Chromium (VI) content	БДС EN ISO 17075-1
		2.4.2.3 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2
2.4.3	Finished product	Seam strength	БДС EN 13594 Annex C
2.5	Leather gloves		
2.5.1	Use-surface leather	2.5.1.1 Moisture	БДС EN ISO 4684
		2.5.1.2 Substances extractable with organic solvents	БДС EN ISO 4048 Method cl.8.2
		2.5.1.3. *pH* of aqueous extract	БДС EN ISO 4045
		2.5.1.4 Chromium(VI) content	БДС EN ISO 17075-1
		2.5.1.5 Water vapor permeability	БДС 6783 cl.8 БДС EN ISO 20344 cl. 6.6 БДС EN ISO 20344/A1 БДС EN ISO 14268

Type of the scope: *flexible for a part of the scope*			
№	**Tested products**	**Type of test/characteristic**	**Test methods (standard/ validated method)**
1	2	3	4
		2.5.1.6 Coefficient of water vapor permeability	БДС EN ISO 20344 pt 6.8 БДС EN ISO 20344/A1
		2.5.1.7 Water vapor absorption	БДС EN ISO 20344 pt 6.7 БДС EN ISO 20344/A1
		2.5.1.8 Resistance to water penetration	БДС EN ISO 5403-1
		2.5.1.9 Water absorption	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.5.1.10 Water permeability	БДС EN ISO 5403-1 БДС EN ISO 20344 cl.6.13 БДС EN ISO 20344/A1
		2.5.1.11 Tear strength (resistance)	БДС EN ISO 3377-1 БДС EN ISO 3377-2
		2.5.1.12 Thickness	БДС EN ISO 2589
		2.5.1.13 Elongation at a specified load	БДС EN ISO 3376
		2.5.1.14 Tensile strength	БДС EN ISO 3376
		2.5.1.15 Maximum force to seam rupture	БДС 12789
		2.5.1.16 Color fastness to cycles of to-and-fro rubbing	БДС EN ISO 11640
		2.5.1.17 Color fastness to water spotting	БДС EN ISO 15700
2.5.2	Finished product	2.5.2.1 Palm size	БДС EN ISO 21420
		2.5.2.2 Glove size	БДС EN ISO 21420
		2.5.2.3 Seam strength	БДС EN 13594 Annex C
2.6	Textile, coated textile	2.6.1 Tear strength (resistance)	БДС EN ISO 4674-1 Method B
		2.6.2 Tensile strength and elongation at break	БДС EN ISO 1421 Method 1
		2.6.3 Water vapor permeability	БДС EN ISO 20344 cl.6.6 БДС EN ISO 20344/A1 БДС EN ISO 14268
		2.6.4 Water vapor coefficient	БДС EN ISO 20344 cl.6.8 БДС EN ISO 20344/A1
		2.6.5 Abrasion resistance	БДС EN ISO 20344 cl.6.12 БДС EN ISO 20344/A1
3.	**SLIDE FASTENERS (ZIPS)**	3.1 Lateral strength of slide fastener	БДС EN 16732 Annex G
		3.2 Strength of open-end slide fastener box	БДС EN 16732 Annex D
		3.3 Strength of closed end	БДС EN 16732 Annex C
		3.4 Lateral strength open-end attachment	БДС EN 16732 Annex H
		3.5 Strength of slider locking device	БДС EN 16732 Annex I

Notes:
(*) Quantitative composition is a characteristic of % content of 48 textile fibers (Annex 1 to Article 14, 14 and &1, pt. 2) in binary and ternary textile mixtures and combinations thereof (Section III, Table with examples of typical ternary fiber mixtures), according to the Regulation on labelling and naming of textile products (OLNTP)*.
(**) OLNTP repealed standard without replacement.

Flexible scope: Implementing a new version of standards/documents or standards / documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by laboratory.

Fixed scope:
VALMI-01/2019 – Methods of testing the water impermeability of complete footwear.

References:
(**) OLNTP – Ordinance on labelling and naming of textile products (Decree of the Council of Ministers 114/2006, SG № 44 /2006, amended and supplemented in SG № 31/20.04.2012)
2. REU №1007/2011 - Regulation of the European Parliament and of the Council from 27.09.2011, effective from 08.05.2012 – on Labeling of textile fiber names and marking of textile products with regard to their fiber composition.

ORDER

To issue the certificate of accreditation reg. № 33 ЛИ/06.03.2025, valid until 28.05.2028 and this order enclosed as an integral part of it.

The certificate of accreditation with the enclosure should be obtained from director of Defense Institute Professor Tsvetan Lazarov, the Head of Central Testing Laboratory of Logistic Properties at Defense Institute Professor Tsvetan Lazarov, or other authorized person in the office of EA BAS.

Upon receipt of the certificate issued and enclosure, the accredited person is obliged to return to EA BAS the originals of certificate of accreditation reg. № 33 ЛИ/28.05.2024 valid until 28.05.2028 and its enclosure, EA BAS order reg. № A 189/28.05.2024.

This order shall be notified to Defense Institute Professor Tsvetan Lazarov, within 3 (three) days from its issuance.

Eng. Irena Borislavova

Executive Director of EA BAS