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SR + FS

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DC 16544

SAMPLING: done by the Applicant

TEST REPORTS: this document is based on Test Reports no.: 4211409/E, 4230209/E;

SAMPLES: Back protectors for *cycling and winter sports* use, in the following articles:

- **"PROTECTOR VEST MEN"**, carbon gray color;
- **"PROTECTOR VEST WOMEN"**, carbon gray color;
- **"PROTECTOR VEST KIDS"**, carbon gray color;
- **"PROTECTOR VEST LITE MEN"**, black color;
- **"PROTECTOR VEST LITE WOMEN"**, black color;
- **"PROTECTOR VEST PRO MEN"**, black color;
- **"PROTECTOR VEST PRO WOMEN"**, black color.

See the complete description on the next page.

REQUEST: Laboratory tests in accordance with EN 1621-2:2014 T+/T- (*winter sports*) level 1 for the aim of the Certification (Regulation (EU)2016/425), for the following articles:

- PROTECTOR VEST MEN and PROTECTOR VEST WOMEN, carbon gray color;
- PROTECTOR VEST KIDS, carbon gray color;
- PROTECTOR VEST LITE MEN and PROTECTOR VEST LITE WOMEN, black color;

Laboratory tests in accordance with EN 1621-2:2014 T+/T- (*winter sports*) level 2 for the aim of the Certification (Regulation (EU)2016/425), for the following articles:

- PROTECTOR VEST PRO MEN and PROTECTOR VEST PRO WOMEN, black color.


NOTE:

This document cancels and replaces the previous Technical Report n. 4211615/E dated 21/04/2023.

Corrections: on pages 1-2-3-9.

Edits: in italics.

Reason: typing mistakes and addition of missing tests.

OUTCOME:  **PASS**

Notes:

All results refer exclusively to the tested materials as received.

Partial reproduction or publication not admitted without written authorization by RCT.

Positive results of a test report do not imply that the tested product is "certified" or "approved" by RCT.

Comments and interpretations are of subjective nature and not part of the Test Report.

Test carried out by qualified partner lab ISO 17025.

* Test not accredited by Accredia

Conformity assessment criterion: the result is considered compliant until the value falls within or coincides with the specification limit.

Unless otherwise indicated, the test conditions correspond to the reference standard.

M22 rev08 del 01/01/2023



Description:

article: **PROTECTOR VEST MEN**, carbon gray color;
made of a carbon gray fabric **(1)** with black satin tape **(4)**;
back padding: black partially perforated TPE (WS 48-52 cm);
fastening system:
- black elastic belt **(2)** with hook and loop closure;
- by means of a polymeric zipper closure with gray woven tape **(3a)**.

article: **PROTECTOR VEST WOMEN**, carbon gray color;
made of a carbon gray fabric **(1)** with black satin tape **(4)**;
back padding: black partially perforated TPE (WS 48-52 cm);
fastening system:
- black elastic belt **(2)** with hook and loop closure;
- by means of a polymeric zipper closure with gray woven tape **(3a)**.

article: **PROTECTOR VEST KIDS**, carbon gray color;
made of a carbon gray fabric **(1)** with black satin tape **(4)**;
back padding: black partially perforated TPE (WS 33-37 cm);
fastening system:
- black elastic belt **(2)** with hook and loop closure;
- by means of a polymeric zipper closure with gray woven tape **(3a)**;
- black Velcro **(5)**.

article: **PROTECTOR VEST LITE MEN**, black color;
made of a black fabric **(6)** with black satin tape **(4)**;
back padding: black partially perforated TPE (WS 48-52 cm);
fastening system:
- black elastic belt **(2)** with hook and loop closure;
- by means of a polymeric zipper closure with black woven tape **(3b)**.

article: **PROTECTOR VEST LITE WOMEN**, black color;
made of a black fabric **(6)** with black satin tape **(4)**;
back padding: black partially perforated TPE (WS 48-52 cm);
fastening system:
- black elastic belt **(2)** with hook and loop closure;
- by means of a polymeric zipper closure with black woven tape **(3b)**.



article: **PROTECTO VEST PRO MEN**, black color;

made of a black fabric **(7)**, black fabric **(8)**, black Lycra tape **(9)** and with black satin tape **(4)**;

back padding: black partially perforated TPE (WS 48-52 cm);

fastening system:

- hip belt system 2 **(10)**;
- black Velcro **(11)**;
- black tape **(12)**;
- black Velcro **(13)**;
- black tape for edge **(14)**;
- by means of a polymeric zipper closure with black woven tape **(3b)**.

article: **PROTECTOR VEST PRO WOMEN**, black color;

made of a black fabric **(7)**, black fabric **(8)**, black Lycra tape **(9)** and with black satin tape **(4)**;

back padding: black partially perforated TPE (WS 48-52 cm);

fastening system:

- hip belt system 2 **(10)**;
- black Velcro **(11)**;
- black tape **(12)**;
- black Velcro **(13)**;
- black tape for edge **(14)**;
- by means of a polymeric zipper closure with black woven tape **(3b)**.

Groups of materials tested for Azo-dyes content:

- a) 1+2+3a+4;
- b) 5+6+3b+7;
- c) 8+9+10+11;
- d) 12+13+14.



References	Tests	Measuring unit	Requirements	Results
EN 1621-2:2014	Motorcyclists' back protectors			
4.1*	General	-	Protectors shall be safe for use, comfortable to wear and fit for their purpose	pass
4.2 (EN 1621-1:2012)*	Innocuousness			
EN ISO 13688:2013 +A1:2021 4.2*	Innocuousness		Materials shall not adversely affect the health or hygiene of the user, they shall not release substances generally known to be toxic, carcinogenic, mutagenic, allergenic, toxic to reproduction or otherwise harmful.	pass
4.2/c ISO 4045:2018 ISO 3071:2020	pH - leather - other materials extracting solution: KCl	- -	> 3,5 and < 9,5	Material: 1 6,8 2 7,6 3a 8,0 3b 6,9 4 7,9 5 6,3 6 6,9 7 6,9 8 6,9 9 7,2 10 7,9 11 7,0 12 7,2 13 7,8 14 8,0
4.2 d ISO 14362-1:2017# textile	Azo colorants content:	mg/kg	absent (< 30 mg/kg)	Groups of materials: a, b, c, d pass
5.2.2 (6.2) (EN ISO 11642:2012 o EN ISO 105-E01: 2013)*	Colour fastness to water - discharge a) acetate b) cotton c) polyamide d) polyester e) polyacrylic f) wool	Grey scale 5=good, 1=bad.	≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4	Material: 1 2 3a 3b 5 4/5 5 4/5 4/5 4/5 4/5 4/5 4/5 4/5 4/5 4/5 5 5 5 5 5 5 5 5



References	Tests	Measuring unit	Requirements	Results
5.2.2 (6.2) (EN ISO 11642:2012 o EN ISO 105-E01: 2013)*	Colour fastness to water - discharge a) acetate b) cotton c) polyamide d) polyester e) polyacrylic f) wool	Grey scale 5=good, 1=bad.	≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4	Material: 4 5 6 7 4/5 5 4/5 4/5 4/5 5 4/5 5 5 4/5 4/5 5 5 5 5 5 5 5 5 5
5.2.2 (6.2) (EN ISO 11642:2012 o EN ISO 105-E01: 2013)*	Colour fastness to water - discharge a) acetate b) cotton c) polyamide d) polyester e) polyacrylic f) wool	Grey scale 5=good, 1=bad.	≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4	Material: 8 9 10 11 4/5 5 5 4/5 4/5 5 5 4/5 4/5 5 5 4/5 5 5 5 5 5 5 5 5
5.2.2 (6.2) (EN ISO 11642:2012 o EN ISO 105-E01: 2013)*	Colour fastness to water - discharge a) acetate b) cotton c) polyamide d) polyester e) polyacrylic f) wool	Grey scale 5=good, 1=bad.	≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4 ≥ 4	Material: 12 13 14 4/5 5 5 4/5 5 5 4/5 5 5 5 5 5 5 5 5
4.3 (Table 1)*	Type of protector	-	Full, central or lower back protector (FB, CB, LB)	FB



References	Tests	Measuring unit	Requirements	Results
4.4 (5.1.6.3) (optional T+)	Impact force transmission 50J / bar impactor "kerbstone" - High temperature Conditioning: 24h/+40°C - Single values: 1) 2) 3) 4) 5) - Mean: - Level: Visual check after impact	kN	lev.1 lev.2 ≤ 24 ≤ 12 ≤ 18 ≤ 9 1/2 no fragmentation of the sample and no sharp edges, cracks and loss of soft debris are permissible	size: 48-52 10,7 11,1 11,1 12,0 12,0 11,4 1 pass
me-int 040-01 (analogue method 4.4 - 5.1.6.4)* (Winter sport /Multisport) (optional)	Impact force transmission 50J / bar impactor "kerbstone" Conditioning: 24h/-20°C - Single values: 1) 2) 3) 4) 5) - Mean: - Level: Visual check after impact	kN	lev.1 lev.2 ≤ 24 ≤ 12 ≤ 18 ≤ 9 1/2 no fragmentation of the sample and no sharp edges, cracks and loss of soft debris are permissible	size: 48-52 7,3 7,3 6,7 7,1 7,2 7,1 2 pass



References	Tests	Measuring unit	Requirements	Results
4.4 (5.1.6.3) (optional T+)	Impact force transmission 50J / bar impactor "kerbstone" - High temperature Conditioning: 24h/+40°C - Single values: 1) 2) 3) 4) 5) - Mean: - Level: Visual check after impact	kN	lev.1 lev.2 ≤ 24 ≤ 12 ≤ 18 ≤ 9 1/2 no fragmentation of the sample and no sharp edges, cracks and loss of soft debris are permissible	size: 48-52 9,7 7,5 7,2 9,1 7,7 8,2 2 Pass
me-int 040-01 (analogue method 4.4 - 5.1.6.4)* (Winter sport /Multisport) (optional)	Impact force transmission 50J / bar impactor "kerbstone" Conditioning: 24h/-20°C - Single values: 1) 2) 3) 4) 5) - Mean: - Level: Visual check after impact	kN	lev.1 lev.2 ≤ 24 ≤ 12 ≤ 18 ≤ 9 1/2 no fragmentation of the sample and no sharp edges, cracks and loss of soft debris are permissible	size: 48-52 7,3 7,3 6,7 7,1 7,2 7,1 2 pass
-	Overall protective level	-	1/2	2
	Additional impacts			



References	Tests	Measuring unit	Requirements	Results
analogue method 4.4 (5.1.6.1)	Impact force transmission 50J / bar impactor "kerbstone" - Standard conditioning (23°C/50% r.h.) after 5 washing cycles procedure 3G, drying procedure A - Single values: 1) 2) 3) 4) 5) - Mean: - Level: Visual check after impact	KN KN -	lev.1 lev.2 ≤ 24 ≤ 12 ≤ 18 ≤ 9 1/2 no fragmentation of the sample and no sharp edges, cracks and loss of soft debris are permissible	size: 48-52 8,8 6,9 6,7 7,7 7,2 7,5 2 Pass
4.5 (5.2.1)	Dangerous elements Correspondence between the protective area marked on the back/lumbar protector and the extent of the body part which must be protected	- -	No sharp edges or other features that may cause any inconvenience to the user Pass	pass pass
4.5 (5.2.2)	Ergonomic features - Male/female tester with WS:	- cm	Pass -	pass pass 37 52
4.6*	Sizing Waist-to-shoulder length (W-S) (range min-max) Declared: Verified:	cm cm	- -	33-37 48-52 33-37 48-52
-	Protector's positioning on the body Body protected area coverage		The area of the body declared to be protected is covered adequately by the protector	pass

- End of the Technical Report -