



Test results indicated as not accredited are outside the scope of the laboratory's accreditation

No. 1383328.0

(Please quote this number in all correspondence)

CLIENT:
Pan Products Ltd.
PO Box 396
Dargaville 0340

SAMPLE RECEIVED FROM:
Pan Products Ltd.

Date: 9.8.21

Attn.: Nathan Cottle

SAMPLE DESCRIPTION:
PCV1504-FLYE-L TTMC-W17 STMS vest.

Client Order No.:

Client Reference:

1 of 7

CONFORMANCE TO NZ TRANSPORT AGENCY SPECIFICATIONS, EDITION 4 OF PART 8 CoPTTM, SECTION B, NOVEMBER 2018 (TTMC-W17) & TECHNICAL NOTES 24 JUNE 2019 & 1 JULY 2020

Date Tested: 10/8/2021

Section B3 High Visibility Garments

	Conformance
Background fabric Compliance, Section B3.1.1 (this section is not covered in full by IANZ accreditation)	Conforms (as stated by Qualspec report no. CS17070077Revised1)
Retro-reflectivity, Section B3.1.2 (this section is not covered in by IANZ accreditation)	Conforms (as stated by SGS report no. SHSL1302029053TX & NZWTA report no. 1110548.3)
Retro-reflectivity, Section B3.1.2 – Orange Red Material for STMS Panel (this section is not covered in full by IANZ accreditation)	Conforms (see NZWTA report no. 1197502.6R).
Logos, Section B3.2	N/A
Garment Compliance, Section B3.3	Conforms
Garment Design, Sleeveless Vest Section B3.4.1	Conforms
STMS Sleeveless Vest, Section B3.4.2.1	Conforms
MTC Garment Sleeve, Section B3.4.2.2	N/A

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L A Greer
Signatory


C Judan
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10/08/2021

New Zealand Wool Testing Authority Ltd

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Section B3 High Visibility Garments

Section B3.1.1 Fabric Colour Compliance

Requirement	Results	Conformance
Background material : Fluorescent or non-fluorescent orange-red or yellow to conform to AS/NZS 1906.4:2010, measured both wet and dry, light, perspiration and wash fastness.	See Qualspec report no. CS17070077Revised1.	Conforms (as stated by Qualspec report)

Section B3.1.2 Retro-reflectivity (Note: this section is not covered in full by IANZ accreditation)

Requirement	Results	Conformance
Retro- reflectivity material must comply with specification Class R or Class RF of AS/NZS 1906.4 :2010	See SGS report no. SHSL1302029053TX & NZWTA report no. 1110548.3.	Conforms (as stated by SGS & NZWTA reports)
STMS panel must comply with the colour specification for Class F background material: (photometric performance – 60 CIL/m ² at entrance angle 5.0°, observation angle 0.2° / plus colour coordinates only (excluding rainfall & luminance factor).	See NZWTA report no. 1197502.6R.	Conforms

Section B3.2 Logos

Requirement	Results	Conformance
Lettering , symbols or logos must be on the upper front left of the garment (N/A to STMS)	N/A	N/A
The maximum area of any clear plastic pocket is 7500mm ² (100 x 75 mm) (N/A to STMS).	N/A	N/A
A technical recognition ID, max 30mmx30mm (900 mm ²) may be added to the wearer's upper front right side of the garment.	N/A	N/A
A manufacturers label to a maximum size of 50 x 20 mm may be sewn or printed on the lower sleeve on non-high visibility material.	N/A	N/A

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Section B3 High Visibility Garments

Section B3.3 Garment Compliance

Requirement	Results	Conformance
The tape must be a complete horizontal hoop at approximately waist level. A break at the front of no more than 25mm is permitted (see also Figure 1 of CoPTTM) (overalls are different).	The tape is a complete horizontal hoop. There is a break at the front of length 24mm. There are no breaks at the sides or in the braces.	Conforms
Retro-reflective tapes must be no less than 50 mm wide.	The tape is 50mm wide.	Conforms
Compliance must be achieved for a garment size designed to fit a body chest measurement 100-105 cm.	The size submitted is size L. Body chest measurement: 125 cm	Conforms
The letters TTMC-W17 must be included on the garment label.	The letters are included on the garment label.	Conforms

Garment Design Section B3.4

Garment Design B3.4.1 Sleeveless vest general requirements – based on AS 4602.1:2011 Amendment 1: 2016 & Amendment 2:2020 with additional requirements.

Requirement	Results	Conformance
The design must include a shirt tail that is 150 +5mm longer than the front. The shirt tail may be split, provided there is an overlap.	There is a shirt tail on this garment. It is 153mm longer than the front.	Conforms
The minimum qualifying area measurement of background high visibility material for the recognised 100-105 cm test size garment not covered by retro-reflective material or printing must be: - Front of garment 0.24 m² . - Rear of garment including the 150 mm shirt tail 0.30 m² . Overall length at front not to exceed 710mm.	Front – excluding the reflective tapes, yellow zip front opening and STMS badge, the background material area is 0.27 m ² . Back – excluding the reflective tapes and STMS badge, the background material area is 0.32 m ² . Front length is 695mm.	Conforms Conforms Conforms

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Section B3 High Visibility Garments
Garment Design – continued B3.4.1 Sleeveless vest

Requirement	Results	Conformance
Background high visibility material must encircle the torso from the top, with no other colour except for: -Specified retro-reflective material -Permitted front opening -Permitted logo and technical ID area	Background high visibility material encircles the torso from the top. The exclusions are: -Specified retro-reflective material -Permitted front opening	Conforms
A permitted front opening to accommodate a zip fastener or similar closing device may be no wider than 25mm. Zip colour may be black but a colour matching the garment colour is preferred. Buttons, domes and similar closure devices must match the colour of the garment but need not to be compliant.	The garment has a yellow zip front opening that is 7mm wide. The opening is down to the entire front of the garment.	Conforms
Compliant retro-reflective material must be positioned to comply with the pattern in Figures 1: - belt and braces (front & back) or cross configuration at the back. - top and bottom of cross configuration must align vertically. - a strip of complying retro-reflective material must be located on the back of the garment from side seam to side seam positioned 50 ±5mm from the bottom hem. - each brace must be spaced 170mm Minimum apart at the belt, front and back. - Figure 5 diagrams state that the length from the highest point of the shoulder to the waist tape must be 530 ±20 mm .	There are vertical strips placed over the shoulders. The strips join up with a hoop on the front and the back (front & back - belt and braces pattern). N/A There is an additional retro-reflective tape at the bottom of the garment positioned 46-49mm from the bottom hem. The vertical strips are: front - 292mm apart back - 290mm apart Length from the highest point of the shoulder to the bottom waist hoop is: front - 542mm back - 540mm	Conforms N/A Conforms Conforms Conforms
STMS only – The optional retroreflective cross configuration on the back of a garment is not permitted.	Belt & braces pattern.	Conforms

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Section B3.4.2.1 STMS

Requirement	Results	Conformance
The background colour must be fluorescent or non-fluorescent yellow to conform with AS/NZS 1906.4:2010.	See NZWTA report no. 1197502.6R.	Conforms
There must be a retro-reflective orange panel on the back and front left as per Fig 2A: Front - 100 x 100mm ±10mm Back - 250 x 130mm ±10mm Lettering must be black. Helvetica Bold Letter Height (front) - 35 ±5mm Letter Height (back) - 85 ±5mm	Position: Front – left chest Back – upper back centre Size: Front – 100x100mm Back – 248x130mm Lettering colour- Black Font – Helvetica bold Letter height: front – 33-35mm Letter height: back – 81-85mm	Conforms Conforms Conforms Conforms

Section B3.4.2.2 Optional MTC Garment Sleeve

Requirement	Results	Conformance
The sleeve background colour must be fluorescent or non-fluorescent yellow to conform with AS/NZS 1906.4:2010.	N/A	N/A
Must have a compliant retro-reflective hoop on the arm above the elbow and between the elbow and the wrist.	N/A	N/A

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