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<b>Report Number:</b>	CS-LAB-1500	
<b>Title:</b>	Technical Data	
<b>Customer:</b>	Reid & Twiname	
<b>Requested By:</b>	Joe Qi	
<b>Issue Date:</b>	01/11/2023	

**Information requested:** Technical data for Quality 62 (Vigor) with acrylic backing & NitroPhlam365

Quality:	Vigor (Quality 62)	Post Treatment:	Acrylic Backcoat & NitroPhlam365 (XBAC & XAAC)
Fabric Code:	XBAC & XAAC	Standard Treatment:	Acrylic Backcoat & NitroPhlam365 (XBAC & XAAC)
Test	Standard	Specification	Tolerance
COMPOSITION	EU Regulation No. 1007/2011	<b>Pile:</b> 85% Wool, 15% Nylon <b>Ground:</b> 100% Cotton <b>Overall:</b> 54% Wool, 36% Cotton, 10% Nylon	± 3%
WEIGHT	BS EN 12127	980 g/m <sup>2</sup> 1470 g/lin.m	± 5%
WIDTH	BS EN 1773	150 cm	MINIMUM
THICKNESS	BS 4051, ISO 1765	4.2 mm	± 0.3 mm
BOW & SKEW	BS 2819	± 3%	MAXIMUM
ABRASION	BS EN ISO 14465	≥80,000	MINIMUM
CHANGE IN SHADE	BS EN ISO 14465	3,000 RUBS: 4 5,000 RUBS: 4	MINIMUM
COLOUR FASTNESS TO LIGHT	BS EN ISO 105 B02	6	MINIMUM
COLOUR FASTNESS TO RUBBING	BS EN ISO 105 X12	WET: 4 DRY: 4	MINIMUM
COLOUR FASTNESS TO DRY CLEANING	BS EN ISO 105 D01	N/A	-
COLOUR FASTNESS TO SHAMPOO	BS 1006 UK-TB	4	MINIMUM
COLOUR FASTNESS TO SPOTTING	BS EN ISO 105 - E07 - E05 - E06	N/A	-
ACID PERSPIRATION	BS EN ISO 105 E04	CHANGE IN SHADE: 4 STAINING: 4	MINIMUM
ALKALI PERSPIRATION	BS EN ISO 105 E04	CHANGE IN SHADE: 4 STAINING: 4	MINIMUM

PILLING	BS EN ISO 12945-2	N/A	-
SEAM SLIPPAGE	BS EN ISO 13939-2	N/A	-
TENSILE STRENGTH	BS EN ISO 13934-1	WARP: 650 N WEFT: 650 N	MINIMUM
EXTENSION AT BREAK	BS EN ISO 13934-1	5 – 15 %	MINIMUM
TEAR STRENGTH	BS EN ISO 13937-3	WARP: 35 N WEFT: 25 N	MINIMUM
GUARANTEE	-	5 years	-
<b>Test</b>	<b>US Standard</b>	<b>Specification</b>	<b>Tolerance</b>
WEIGHT/ SQ YARD	Converted from BS 12127	29 oz/yd <sup>2</sup>	± 5%
WEIGHT/ RUNNING YARD	Converted from BS 12127	47 ½ oz/running.yd	± 5%
WIDTH	Converted from BS EN 1773	59 Inches	MINIMUM
THICKNESS	Converted from BS 4051, ISO 1765	0.164 Inches	± 0.012 Inches
CLEANING	Vacuum regularly, wipe clean with damp cloth or shampoo using proprietary upholstery shampoo.		
<b>BUS &amp; COACH FLAMMABILITY</b>			
<b>Test</b>	<b>Standards</b>	<b>Fabric or Composite</b>	<b>Classification</b>
Crib 7	BS 5852 Ignition Source 7	Composite	-
ECE Regulation 118	Reg 118 Annex 6	Fabric	-
	Reg 118 Annex 7	Fabric	-
	Reg 118 Annex 8	Fabric	-
FMVSS 302	FMVSS 302 Horizontal Burning Rate	Fabric	-
Curtains & Drapes	BS 5867-2: Type B Curtains & Drapes	Fabric	-
<b>RAIL FLAMMABILITY</b>			
<b>Test</b>	<b>Standards</b>	<b>Fabric or Composite</b>	<b>Classification</b>
BS 6853	BS 476: Part 7 Surface Spread of Flame	Fabric	-
	BS 476: Part 7 Surface Spread of Flame	Composite	-
	BS6853 B.2 Smoke Toxicity	Composite	-
	BS6853 B.2 Smoke Toxicity	Fabric	-
	BS6853 D.8.5 Smoke Opacity	Fabric	-

EN 45545-2	ISO 5660-1 Heat Release Mahre	Composite	HL3
	EN ISO 5659-2 Smoke Opacity	Composite	HL3
	EN ISO 5659-2 Smoke Toxicity	Composite	HL3
UIC 542-2	UIC 564-2 Appendix 5	Fabric	-
DIN 5510-2	DIN 54837	Fabric	-
	DIN EN ISO 5659-2	Fabric	-
NFPA 130	14 CFR 25, F, Part 1 (FAR 25.853)	Fabric	-
	ASTM E662 Smoke Opacity	Fabric	-
	ASTM E 1354 Cone Calorimeter	Fabric	-
	BSS 7239 Smoke Toxicity	Fabric	-
	SMP 800-C Smoke Toxicity	Fabric	-
Docket 90	14 CFR 25, F, Part 1 (FAR 25.853)	Fabric	-
	ASTM E662 Smoke Opacity	Fabric	-
ISO 4589 LOI	ISO 4589 LOI	Fabric	-
<b>RAIL (PANELS) FLAMMABILITY</b>			
<b>Test</b>	<b>Standards</b>	<b>Fabric or Composite</b>	<b>Classification</b>
BS 6853 Vertical and Prone surfaces	BS 476: Part 6 Fire Propagation	Composite	-
	BS 476: Part 7 Surface Spread of Flame	Composite	-
	BS6853 B.2 Smoke Toxicity	Composite	-
	BS6853 D.8.4 Smoke Opacity	Composite	-
EN 45545-2 Vertical and Prone surfaces	ISO 5658-2 Lateral Spread of Flame	Composite	-
	ISO 5660-1 Heat Release Mahre	Composite	-
	EN ISO 5659-2 Ds	Composite	-
	EN ISO 5659-2 VOF4	Composite	-
	EN ISO 5659-2 CITG	Composite	-

RAIL (CURTAINS) FLAMMABILITY			
Test	Standards	Fabric or Composite	Classification
EN 45545-2 Vertical surfaces	ISO 5658-2 Lateral Spread of Flame	Fabric	-
	ISO 5660-1 Heat Release Mahre	Fabric	-
	EN ISO 5659-2 Ds	Fabric	-
	EN ISO 5659-2 VOF4	Fabric	-
	EN ISO 5659-2 CITG	Fabric	-
BS 6853	BS 5438 Curtains & Drapes	Fabric	-
	BS 6853 D.8.3 Small scale Opacity test	Fabric	-
	BS 6853 B.1 NF X 70-100 Toxicity	Fabric	-

**End of document**

Approvals		
Written/ Revised by	Signature	Date
M. Trebowicz	<i>Marek Trebowicz</i>	01/11/2023