



## Sunbrella® Horizon™ Technical Data Sheet

Revision Date: 01/14/2020

Product Type	Sunbrella® Horizon™
Material Content	100% Vinyl with Knit Polyester Backing

Test Name	Test Method	Basis	Nominal Value
Fabric Weight	ASTM D3776	Ounces/Square Yard	19.8
Width	NTC 228	Inches	54
Thickness	NT 8.2.4-032 Test N°1	Millimeters	1.20 – 1.60
Bond Strength Adhesion of Vinyl Film to Fabric Warp	ASTM D751	N/in (lbf/in)	> 15.0 (> 3.4)
Bond Strength Adhesion of Vinyl Film to Fabric Filling	ASTM D751	N/in (lbf/in)	> 15.0 (> 3.4)
Color Reading	NT 8.2.4-013	ΔE CMC Units	< 0.8
MD Stretch (Warp)	SAE J855 (NT 8.2.4-058 Test N°1) (55% - 80%)	Pass / Fail	Pass
AMD Stretch (Fill)	SAE J855 (NT 8.2.4-058 Test N°1) (25% - 50%)	Pass / Fail	Pass
Antimicrobial Pink Stain Resistance	ASTM E1428-15 (No Stain)	Grading	0
Resistance of Synthetic Polymeric Material to Fungi	ASTM G-21 (No Fungal Growth)	Rating	0
Antifungal Activity Assessment on Textile Materials	AATCC 30, Test III (No Growth)	Pass / Fail	Pass
Resistance to Growth of Mold on the Surface of Interior Coatings in an Environment Chamber	ASTM D3273-12 (No Defacement)	Rating	10
Non-Phthalate **	CPSC-CH-C1001-09.3	ppm	<1000
Colorfastness	SAE J 2527 @ 1500 kJ	Grading	4+
Colorfastness	AATCC 169 Option 3@ 2200 kJ	Grading	4+
Lightfastness/Colorfastness to Light	AATCC TM16.	Grading	
Crocking	AATCC 8 (Wet and Dry)	Grading	5

Test Name	Test Method	Basis	Nominal Value
Abrasion Resistance -Wyzenbeek	ASTM D4157-07 (CFFA –U-201E 2012) Duck #10 (Heavy Duty)	Cycles	200,000
Abrasion- Martindale	EN ISO 12947-3 – Textiles – Determination of the abrasion resistance of fabrics by the Martindale method – Part 3: Determination of mass loss (ISO 12947-3: 1998) – Test Series d	Percent	0.3% After 100,000 Cycles
Tear Strength MD	ASTM D 2261	Lbs	18.0+
Tear Strength CD	ASTM D 2261	Lbs	10.0+
Volatility	ASTM D1203-03 (CFFA 18) (<8% Weight Loss)	Complies/ Does Not Comply	Complies (Actual=1.0%)
Cold Crack	Federal Test Standard 191A 5874 (CFFA 6 2007) @ -20F	Pass / Fail	Pass
W-Flex	FLTM BN 102-02 N or ASTM D2097-03 (CFFA 10) (No Cracking, Whitening, Crazing or Separation of Coating from Backing)	Cycles	25,000
Heat Aging	LP-463LB-13-01 7 days @85C	ΔE CMC Units	< 3.0
No. 302 Burn Test	MVSS302	mm/minute	Pass
California Technical Bulletin #117	TB117-2013 (Meets Class 1 Requirements)	Pass / Fail	Pass
IMO	2010 FTP Code - International Code for Application of Fire Test Procedures – Resolution MSC,307(88): Annex I – Fire Test Procedures Part 8 – Test for Upholstered Furniture: Cigarette and Small Flame Ignition	Pass/Fail	Pass
British Standard 6852	2006 – Methods of Test for Assessment of the Ignitability of Upholstered Seating by Smouldering Cigarette and Flaming Ignition Sources	Pass/Fail	Pass
UFAC	UFAC Fabric Classification Test Method 1990 Cigarette Ignition Resistance of Fabric Intended for Use in Upholstered Furniture	Rating	Class I
Australian/New Zealand Standard™	AS/NZS 1530.3-1999 Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release	Indices	Ignitability Index: 16 (Range 0 – 20) Spread of Flame Index: 0 (Range 0 – 10) Heat Evolved Index: 1 (Range 0 – 10) Smoke Developed Index: 5 (Range 0 – 10)
ASTM E84	ASTM E84-19b Surface Burning Characteristics of Building Materials	Class	B

Test Name	Test Method	Basis	Nominal Value
CFFA11	ASTM D 2097-03 Standard Method of Flex Testing of Finish on Upholstery Leather after ASTM D 1239-07 Standard Test Method for Resistance of Plastic Films to Extraction by Chemicals CFFA 11 – After 14 days of Hydrolytic Stability Exposure at 158F (CODE: 725)	Yes/ No: Evidence of Whitening, Cracking or Separation of Coating from Backing after 25,000 Cycles	No
Scuffing	SAE J365 MAY2012 Method of Testing Resistance to Scuffing of Trim Materials	Yes/No: Evidence of lifting, peeling or excessive scuffing after 200 cycles	No
Warranty	Loss of strength or color due to normal usage and exposure, and resistance to mildew and atmospheric chemicals.	Years	5
Warranty	Pink bacterial staining	Years	3
Warranty	Replacement costs to pay for the re-upholstery and/or trim up to \$40 per linear yard of product	Years	3
Conditions to Avoid	Steam should not be used on Horizon during fabrication to remove wrinkles and creases or during use. Dry heat can be used. Always test a patch in an inconspicuous place.	Avoid use of steam	NA
GREENGUARD	UL 2818 GREENGUARD Standard for Building Materials, Finishes and Furnishings, UL 2821 GREENGUARD Test Method for Building Materials, Finishes and Furnishings, California Section 01350	Pass/Fail	Pass
Prop-65:		Label Required/No Labeling Required	No Labeling Required
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)	Compliance/Does Not Comply	Compliance

**\*\* Phthalates tested**

- Di-n-butylphthalate(DnBP) (CAS No. 84-74-2)
- Benzyl butyl phthalate(BBP) (CAS No. 85-68-7)
- Di(2-ethylhexyl)phthalate(DEHP) (CAS No. 117-81-7)
- Di-n-octyl phthalate (DnOP) (CAS No. 117-84-0)
- Diisononyl phthalate (DINP) (CAS Nos. 28553-12-0, 68515-48-0)
- Diisodecyl phthalate (DIDP) (CAS Nos. 26761-40-0, 68515-49-1)
- Di-n-hexyl phthalate (DnHP) (CAS No. 84-75-3)