

## The DOW ECOLIBRIUM Value Proposition:

DOW ECOLIBRIUM™ Bio-Based Plasticizers offer a renewable alternative that is phthalate-free, offering a more sustainable option while having the same great performance and feel of current materials.

- Lowers greenhouse gas emissions as much as 40% vs. existing PVC compounds
- 98% of the plasticizer is derived from non fossil fuel based feed stock.
- Lower carbon footprint\*
- Phthalate-free
- LEED credits for rapidly renewable content may be available\*\*
- RoHS compliant
- Ability for compound to be recycled in a standard vinyl stream
- Maintains all of the established benefits of traditional vinyl such as durability, cleanability and fabric longevity

\*Based on Lifecycle Analysis (LCA) conducted by The Dow Chemical Company and third party reviewed.  
\*\*See website [www.usgbc.org](http://www.usgbc.org) for more information.

Code	Color	SOLAR OPTICAL PROPERTIES				SHGC/G VALUE	
		TS	RS	AS	TV	SINGLE 1/4 CL	INSULATING 1 HA
<b>STYLE 4400 - 3%</b>							
U58	Eco/Chalk	12	70	18	7	0.26	0.13
U59	Eco/Alabaster	10	62	28	6	0.30	0.15
U60	Eco/Pebblestone	9	51	40	6	0.37	0.24
U61	Eco/Greystone	6	39	55	5	0.42	0.28
U62	Eco/Granite	6	48	46	5	0.37	0.17
U63	Eco/Pewter	3	26	71	2	0.49	0.22
U64	Eco/Ash	3	10	87	4	0.57	0.36
U65	Eco/Ebony	3	3	94	3	0.61	0.37
U66	Eco/Tobacco	3	5	92	3	0.60	0.37
<b>STYLE 4000 - 5%</b>							
U58	Eco/Chalk	16	68	16	12	0.28	0.22
U59	Eco/Alabaster	15	57	28	13	0.34	0.24
U60	Eco/Pebblestone	14	49	37	12	0.38	0.26
U61	Eco/Greystone	10	34	56	9	0.45	0.21
U62	Eco/Granite	11	41	48	10	0.42	0.20
U63	Eco/Pewter	8	27	65	9	0.49	0.31
U64	Eco/Ash	7	11	82	8	0.57	0.26
U65	Eco/Ebony	6	5	89	8	0.60	0.37
U66	Eco/Tobacco	7	5	88	8	0.61	0.27
<b>STYLE 4100 - 10%</b>							
U58	Eco/Chalk	18	66	16	15	0.30	0.22
U59	Eco/Alabaster	19	56	25	16	0.36	0.25
U60	Eco/Pebblestone	16	48	36	15	0.39	0.27
U61	Eco/Greystone	14	35	51	14	0.46	0.30
U62	Eco/Granite	15	42	43	14	0.43	0.20
U63	Eco/Pewter	12	26	62	14	0.50	0.32
U64	Eco/Ash	10	10	80	11	0.58	0.27
U65	Eco/Ebony	10	4	86	11	0.62	0.37
U66	Eco/Tobacco	10	5	85	11	0.61	0.28



Microban® antimicrobial protection inhibits the growth of stain-causing bacteria, mold and mildew on the shade.



PRODUCT CERTIFIED FOR LOW CHEMICAL EMISSIONS  
[UL.COM/GG](http://UL.COM/GG)  
UL 2818



MIF Seal of Approval



TS = Solar Transmittance  
RS = Solar Reflectance  
AS = Solar Absorptance  
TV = Visual Transmittance

SHGC = Solar Heat Gain Coefficient

1/4 CL = 1/4" Clear Glass  
1 HA = 1" Heat Absorbing Glass

Fabrics Installed Internally  
Zero-Degree Profile Angle

For additional performance values, test references and technical definitions visit us at [www.phifer.com](http://www.phifer.com).

# STYLE 4400 / 4000 / 4100 SPECIFICATIONS

As the only sun control fabrics in the market to use DOW's unique ECOLIBRIUM bio-based plasticizer, Styles 4400, 4000 and 4100 combine the durability of vinyl coated polyester with the latest in green PVC technology. ECOLIBRIUM is a renewable alternative to traditional plasticizers that lowers greenhouse gas emissions as much as 40% vs existing PVC compounds. Style 4400/4000/4100 with DOW ECOLIBRIUM is phthalate-free, lead-free and RoHS compliant. These fabrics maintain all of the established benefits of traditional vinyl such as durability, cleanability and fabric longevity. Style 4400/4000/4100 can also be used in exterior shading systems.

<b>FIRE CLASSIFICATION</b>	California U.S. Title 19 (small scale) NFPA 101 (Class A Rating) BS 5867 Part 2 Type B Performance NFPA 701 TM#2 (large scale)	NFPA 701 TM#1 (small scale) IBC Section 803.1.1 (Class A Rating) CAN/ULC-S 109-03 (large and small scale) CAN/CGSB2-4.162-M80	
<b>BACTERIA AND FUNGAL RESISTANCE</b>	ASTM E 2180 ASTM G21 GREENGUARD Mold and Bacteria Standard ASTM 6329 includes Microban antimicrobial additives	AATCC30 Part 3	ASTM D 3273
<b>ENVIRONMENTAL CERTIFICATION</b>	GREENGUARD Certified to these standards for low chemical emissions into indoor air during product usage DOW ECOLIBRIUM Plasticizer is a USDA Certified Bio-Based Product	GREENGUARD Gold	
<b>LEAD FREE</b>	RoHS/Directive 2002/95/EC ANSI/WCMA A 100.1-2007 for lead content US Consumer Product Safety Commission Section 101	REACH (EC 1907/2006) compliant	
<b>WARRANTY</b>	10-year interior 5-year exterior		
<b>ACOUSTICAL PERFORMANCE</b>	NRC (Noise Reduction Coefficient) and SAA (Sound Absorption Average) tested in accordance with ASTM C423-09a		
<b>UV PROTECTION</b>	Seal of Approval by the Melanoma International Foundation (MIF) for effectiveness in preventing sun damage to the skin or eyes		

STYLE	4400	4000	4100
<b>WIDTHS</b>	63", 84", 98" and 126" 160 cm, 213.4 cm, 248.9 cm and 320 cm	63", 84", 98" and 126" 160 cm, 213.4 cm, 248.9 cm and 320 cm	63", 84" and 98" 160 cm, 213.4 cm and 248.9 cm
<b>ROLL LENGTH</b>	30 Linear Yards 27.4 m	30 Linear Yards 27.4 m	30 Linear Yards 27.4 m
<b>COMPOSITION</b>	25% Polyester 75% Vinyl on Polyester	25% Polyester 75% Vinyl on Polyester	25% Polyester 75% Vinyl on Polyester
<b>MESH WEIGHT</b>	19.9 oz/yd <sup>2</sup> 675 g/m <sup>2</sup>	18.0 oz/yd <sup>2</sup> 610 g/m <sup>2</sup>	16.7 oz/yd <sup>2</sup> 566 g/m <sup>2</sup>
<b>FABRIC THICKNESS</b>	0.034 in 0.86 mm	0.032 in 0.81 mm	0.032 in 0.81 mm
<b>OPENNESS FACTOR</b>	Approximately 3%	Approximately 5%	Approximately 10%
<b>UV BLOCKAGE</b>	Approximately 97%	Approximately 95%	Approximately 90%
<b>ACOUSTICAL VALUE</b>	NRC .20 / SAA .19	NRC .10 / SAA .11	NRC .05 / SAA .05

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