

TECHNICAL DATA SHEET

PROPERTY	TEST METHOD	FREQUENCY ⁽¹⁾	UNIT Metric	440-2000	460-2000	480-2000	500-2000
SPECIFICATIONS							
Thickness (min. avg.)	ASTM D-5199	Every roll	mm	1.00	1.50	2.00	2.50
Thickness (min.)	ASTM D-5199	Every roll	mm	0.90	1.35	1.80	2.25
Resin Density	ASTM D-1505	1/Batch	g/cc	> 0.932	> 0.932	> 0.932	> 0.932
Melt Index - 190/2.16 (max.)	ASTM D-1238	1/Batch	g/10 min	1.0	1.0	1.0	1.0
Sheet Density (8)	ASTM D-1505	Every 2 rolls	g/cc	≥ 0.940	≥ 0.940	≥ 0.940	≥ 0.940
Carbon Black Content (9)	ASTM D-4218	Every 2 rolls	%	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D-5596	Every 6 rolls	Category	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2
OIT - standard (avg.)	ASTM D-3895	1/Batch	min	100	100	100	100
Tensile Properties (min. avg.) (2)	ASTM D-6693	Every 2 rolls					
Strength at Yield			kN/m	15	22	31	37
Elongation at Yield			%	13	13	13	12
Strength at Break			kN/m	28	42	57	67
Elongation at Break			%	700	700	700	700
Tear Resistance (min. avg.)	ASTM D-1004	Every 6 rolls	N	125	187	250	311
Puncture Resistance (min. avg.)	ASTM D-4833	Every 6 rolls	N	355	540	695	800
Dimensional Stability	ASTM D-1204	Every 6 rolls	%	± 2	± 2	± 2	± 2
Stress Crack Resistance (SP-NCTL)	ASTM D-5397	1/Batch	hr	400	400	400	400
Oven Aging - % retained after 90 days	ASTM D-5721	Per formulation					
HP OIT (min. avg.)	ASTM D-5885		%	80	80	80	80
UV Resistance - % retained after 1600 hr	GRI-GM-11	Per formulation					
HP-OIT (min. avg.)	ASTM D-5885		%	50	50	50	50
SUPPLY SPECIFICATIONS (Roll dimensions may vary ±1%)							
Roll Dimension - Width	-		m	6.80	6.80	6.8	6.80
Roll Dimension - Length	-		m	237.7	158.5	121.9	97.5
Area (Surface/Roll)	-		m ²	1616.4	1077.8	828.9	663.0

NOTES

1. Testing frequency based on standard roll dimensions and one batch is approximately 180,000 lbs (or one railcar).
2. Machine Direction (MD) and Cross Machine Direction (XMD or TD) average values should be on the basis of 5 specimens each direction.
8. Correlation table is available for ASTM D792 vs ASTM D1505. Both methods give the same results.
9. Correlation table is available for ASTM D1603 vs ASTM D4218. Both methods give the same results.

* All values are nominal test results, except when specified as minimum or maximum.

* The information contained herein is provided for reference purposes only and is not intended as a warranty of guarantee. Final determination of suitability for use contemplated is the sole responsibility of the user. assumes no liability in connection with the use of this information.