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Color stability & UV resistance

CIELAB = Commission internationale d'éclairage L*a*b* color space
 ΔE = color difference, ΔL = lightness axis, Δa = red/green axis, Δb yellow/blue axis

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ΔE 0.0 to 1.0 = difference slightly visible when comparing 2 samples side by side
 ΔE 1.0 to 2.0 = difference clearly visible when comparing 2 samples side by side
 ΔE 2.0 to 4.0 = maximum acceptable difference

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Member of the
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GS = Grey scale by AATCC = American Assoc. of Textile Chemists and Colorists

Swisspearl large size panel - examples of ATI Test results as follows:

Tested product		1000 h	2000 h	3000 h	4000 h	5000 h
CARAT grey 7020 HR	ΔE	0.76	0.99	1.07	1.06	0.97
CARAT red 7030 HR	ΔE	0.21	0.57	0.29	0.22	0.56
CARAT white 7099 HR	ΔE	0.84	0.87	0.83	0.79	0.79
XPRESSIV green 8050	ΔE	0.76	0.87	1.05	1.20	1.28
XPRESSIV white 8090	ΔE	0.35	0.28	0.30	0.38	0.48
XPRESSIV grey 8220 HR	ΔE	0.43	0.59	0.72	0.71	0.68
XPRESSIV blue 8240	ΔE	0.76	0.98	0.83	1.05	0.95
REFLEX black 9221	ΔE	0.13	0.24	0.37	1.06	1.19
REFLEX blue 9242	ΔE	0.53	0.29	0.39	1.70	3.59
NOBILIS grey N 211	ΔE	0.40	0.51	0.27	0.26	0.25
PLANEA red P 314	ΔE	0.33	0.33	0.91	1.60	1.59
CARAT grey 7020 HR	GS	4.5	4.5	4.0	4.5	4.5
XPRESSIV green 8050	GS	4.5	4.5	4.5	4.5	4.0
REFLEX blue 9242	GS	4.5	5.0	5.0	4.0	3.0
NOBILIS grey N 211	GS	4.5	4.5	5.0	5.0	5.0
PLANEA red P 314	GS	5.0	5.0	4.5	4.5	4.5

Correlation between Grey scale and ΔE values as follows:

	AATCC Grey scale	CIELAB ΔE	Tolerance
Best performance	5	0	+ 0.2
	4 - 5	0.8	± 0.2
	4	1.7	± 0.3
	3 - 4	2.5	± 0.35
	3	3.4	± 0.4
	2 - 3	4.8	± 0.5
	2	6.8	± 0.6
	1 - 2	9.6	± 0.7
Worst performance	1	13.6	± 1.0