



GEON[®] 87416

Extrusion Cube Compound Color Weatherability

Geon 87416 exterior rigid extrusion compound offers outstanding weatherability, resistance to pinking, and impact retention. The following table summarizes the actual outdoor weathering data for this compound.

	6 Months			12 Months			24 Months			36 Months			60 Months		
	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL
White 101															
Δ L	-0.05	-0.99	-0.79	1.25	-2.88	-2.16	0.61	-1.79	-0.86	-0.22	-1.06	-0.87	-0.27	-0.81	-0.81
Δ a	-0.12	-0.09	-0.41	-0.11	-0.11	-0.01	-0.21	-0.03	-0.06	-0.23	-0.16	-0.21	-0.11	-0.09	-0.21
Δ b	1.05	0.54	1.80	0.17	1.58	1.03	1.36	0.59	0.36	2.18	1.20	1.16	2.03	0.32	0.68
Δ E	1.06	1.13	2.01	1.27	3.29	2.39	1.51	1.85	0.93	2.20	1.61	1.46	2.05	0.87	1.06
White 138															
Δ L	0.93	-1.06	-0.14	2.49	-1.22	0.05	2.86	-0.76	0.41	2.39	0.21	0.32	2.15	0.79	0.79
Δ a	-0.03	0	0	0.13	0.19	0.12	-0.04	0.17	0.10	-0.09	0.09	0.02	-0.07	0.14	0.05
Δ b	0.62	-0.67	-0.07	-0.25	0.35	0	0.23	-0.50	-0.36	0.63	-0.16	0.10	0.71	-0.70	-0.32
Δ E	1.12	1.26	0.07	2.50	1.28	0.13	2.87	0.93	0.56	2.47	0.28	0.34	2.27	1.07	0.86
White 141															
Δ L	0.90	-0.92	0.04	2.50	-1.15	0.05	2.39	0.68	0.69	2.15	0.44	0.67	2.32	0.89	1.08
Δ a	-0.62	-0.48	-1.07	-0.48	-0.69	-0.77	-1.98	-0.84	-1.00	-0.66	-1.12	-1.18	-0.63	-0.97	-1.11
Δ b	2.32	1.06	2.44	1.85	2.41	1.75	2.93	1.14	1.47	3.10	2.32	2.26	3.34	1.60	1.88
Δ E	2.56	1.48	2.67	3.19	2.76	1.91	4.27	1.57	1.91	3.83	2.61	2.63	4.12	2.07	2.44
White 156															
Δ L	-0.20	-0.29	-0.39	0.93	-0.76	-0.55	-2.52	-0.22	-0.05	-	-	-	-	-	-
Δ a	-0.22	-0.04	-0.10	-0.39	-0.34	-0.07	0.54	0.08	-0.02	-	-	-	-	-	-
Δ b	1.02	0.32	0.46	2.74	1.62	0.58	4.19	0.05	0.23	-	-	-	-	-	-
Δ E	1.06	0.43	0.62	2.91	1.82	0.80	4.92	0.24	0.24	-	-	-	-	-	-
Gray 238															
Δ L	0.87	-0.63	2.01	3.28	1.25	3.35	2.82	5.17	4.97	2.60	5.78	4.33	2.50	6.45	4.55
Δ a	-0.14	-0.03	-0.54	-0.10	-0.11	-0.50	-0.14	-0.09	-0.50	-0.11	-0.15	-0.59	-0.11	-0.07	-0.50
Δ b	0.31	0.31	1.17	0.16	-0.16	0.81	0.65	-1.06	0.41	0.93	-1.19	0.99	0.98	-1.36	0.79
Δ E	0.94	0.70	2.39	3.29	1.27	3.48	2.90	5.28	5.01	2.76	5.90	4.48	2.69	6.59	4.65

Color Change in Hunter L,a,b, units

- Δ L - change in lightness/darkness direction
- Δ a - change in red/green direction
- Δ b - change in yellow/blue direction
- Δ E - total color change

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Color Weatherability

Geon 87416 exterior rigid extrusion compound offers outstanding weatherability, resistance to pinking, and impact retention. The following table summarizes the actual outdoor weathering data for this compound.

	6 Months			12 Months			24 Months			36 Months			60 Months		
	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL
Beige 348															
Δ L	2.58	-0.27	0.37	4.19	0.65	1.35	4.03	3.18	3.69	-	-	-	-	-	-
Δ a	-0.14	-0.01	-0.03	-0.19	0.02	-0.02	-0.38	-0.03	-0.07	-	-	-	-	-	-
Δ b	-1.46	-0.17	-0.52	-2.32	-1.00	-1.33	-1.52	-2.87	-2.65	-	-	-	-	-	-
Δ E	2.96	0.31	0.64	4.80	1.19	1.90	4.34	4.28	4.54	-	-	-	-	-	-
Beige 349															
Δ L	0.79	-0.99	1.92	2.78	0.46	2.51	3.43	3.60	3.86	2.72	4.86	4.06	2.86	4.56	4.28
Δ a	-0.10	0.05	-0.30	-0.09	0.06	-0.25	-0.04	0.12	-0.26	0.04	0.11	-0.31	-0.07	0.11	0.27
Δ b	-0.20	-0.03	0.55	-1.05	-1.20	-0.03	-0.61	-3.21	-0.77	0.06	-3.70	-0.43	0.24	-3.35	-0.61
Δ E	0.82	0.99	2.02	2.97	1.29	2.53	3.48	4.83	3.95	2.72	6.11	4.10	2.87	5.66	4.31
Beige 359															
Δ L	2.51	-0.73	1.40	5.75	3.98	2.65	3.98	6.43	4.49	2.19	7.18	3.24	-	-	-
Δ a	-0.35	-0.15	-0.25	-0.81	-0.70	-0.50	-0.21	-1.12	-0.62	-0.31	-1.31	-0.49	-	-	-
Δ b	-0.96	-0.55	-0.67	-1.73	-2.01	-1.24	-0.79	-2.64	-1.57	-0.27	-2.83	-0.99	-	-	-
Δ E	2.71	0.93	1.57	6.06	4.51	2.97	4.06	7.04	4.80	2.23	7.83	3.43	-	-	-
Gray 238															
Δ L	0.87	0.63	2.01	3.28	1.25	3.35	2.82	5.17	4.97	2.60	5.78	4.33	2.50	6.45	4.55
Δ a	-0.14	-0.03	-0.54	-0.10	-0.11	-0.50	-0.14	-0.09	-0.50	-0.11	-0.15	-0.59	-0.11	-0.07	-0.50
Δ b	0.31	0.31	1.17	0.16	-0.16	0.81	0.65	-1.06	0.41	0.93	-1.19	0.99	0.98	-1.36	0.79
Δ E	0.94	0.70	2.39	3.29	1.27	3.48	2.90	5.28	5.01	2.76	5.90	4.48	2.69	6.59	4.65

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Extrusion Cube Compound
Impact Performance

ASTM D - 4226 Drop Impact Test (in.lbs./mil.) C.125 dart

	ORIGINAL	6 Months			12 Months			24 Months			36 Months			60 Months		
		AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL	AZ	OH	FL
360 °F Melt																
A	1.2	1.0	1.2	1.2	1.0	1.1	1.1	1.0	1.1	1.0	0.6	1.0	0.8	0.8	1.3	1.0
B	3.8+	3.6	3.8+	3.6	1.4	2.1	1.3	1.0	1.5	1.3	0.6	1.3	0.9	0.8	1.5	1.0
390 °F Melt																
A	1.3	1.0	1.0	1.0	0.9	0.9	1.0	0.9	1.0	0.9	0.6	1.0	0.9	0.8	1.4	1.2
B	4.3+	4.2+	4.4+	4.4+	4.2+	4.3+	4.3+	2.6	4.0+	3.4	0.6	4.0	2.7	0.8	3.9	2.8

Note: Impact and impact retention is greatly affected by the melt temperature, internal stresses and product surface.

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