

Delrin® Changes Reference Sheet

DuPont has been consolidating their resin offerings. The following is a summary of data comparing the properties of the obsolete grades to the “new” grades.

Delrin® 550SA NC010 was discontinued at the end of 2002. Delrin® 511P NC010 is the replacement grade.

Delrin® II 150SA NC010 and Delrin® II 150E NC010 were discontinued at the end of 2003. Delrin® 150 NC010 is the replacement grade.

Property	Units	NEW	DISCONTINUED	NEW	DISCONTINUED	
		Delrin® 511P NC010	Delrin II® 550SA NC010	Delrin® 150 NC010	Delrin® II150SA NC010	Delrin® II150E NC010
Tensile Strength @ Yield	psi	10,400	10,000	10,400	10,000	10,000
Elongation @ break	%	33	40	40	84	80
Tensile Modulus	psi	490,000	450,000	450,000	400,000	400,000
Flexural Strength	psi	15,000	14,100		14,300	14,300
Flexural Modulus	psi	480,000	430,000	440,000	420,000	420,000
Notched Izod Impact Strength	ft-lb/in	1.4	1.5	n/a	2.4	2.4
Heat Deflection Temperature @ 66 psi	°F	336	334	327	336	336
Heat Deflection Temperature @ 264 psi	°F	237	264	212	257	257
Melting Point	°F	352	347	352	352	352
Coefficient of Linear Thermal Expansion (73 – 130 °F)	10 ⁻⁵ in/in/°F	6.2			6.7	6.7
Specific Gravity		1.42	1.42	1.42	1.42	1.42
Water Absorption 24 hr Immersion	%	0.3	0.25	0.25	0.25	0.25
Flammability	UL-94	HB (0.75mm)	HB (0.75mm)	HB (0.75mm)	HB (0.75mm)	HB (0.75mm)

Regulatory Summary

	Delrin® 511P NC010	Delrin II® 550SA NC010	Delrin® 150 NC010	Delrin® II150SA NC010	Delrin® II150E NC010
FDA 21 CFR177.2480 for repeated food contact up to 212 °F except those containing 8% alcohol	yes	yes	yes	yes	yes
NSF Standard 61	yes	yes	yes	yes	yes
ASTM D 4181	POM 112	POM110 B44350	POM111	POM 110 B34330 and 4181-94b POM111	POM111
ASTM D 6100	S-POM0112	S-POM0112	S- POM0111	S-POM0111	S- POM0111
USP Class VI	no	no	no	no	no

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