

Static Control Absylux® (Static Control ABS)

ABSYLUX® CN-F (Conductive Acrylonitrile-Butadiene-Styrene) Non-sloughing, carbon fiber filled material with high strength and stiffness, easily machined.

ABSYLUX® CN-P (Conductive Acrylonitrile-Butadiene-Styrene) Carbon-powder-filled, conductive material with high strength and stiffness, and relatively high impact strength. This material is easily machined and fabricated into close tolerance finished parts.

ABSYLUX® SD-A (Static-dissipative Acrylonitrile-Butadiene-Styrene) Non-carbon-filled anti-static material that has high impact strength, good tensile and flexural strength, and is easily machined. Available in natural or black, it can be easily thermoformed in thinner gauges, and is bondable with WELD-ON® 1707.

CRYSTAT® (Anti-static Acrylonitrile-Butadiene-Styrene) Semitransparent, inherently anti-static material available in roll stock and thin gauge sheet. Its strength and clarity make it excellent for thermoforming.

The following physical property information is based on typical values of the resin.

Property	ASTM Test Method	Units	ABSYLUX® CN-F	ABSYLUX® CN-P	ABSYLUX® SD-A	CRYSTAT®
Physical						
Specific gravity	D792		1.14	1.13	1.03	1.10
Water absorption @24 hours	D570	%	0.26	0.30	1.70	—
Mechanical						
Tensile strength @yield	D638	psi	17,250	4,000	5,000	4,200
Tensile elongation @break	D638	%	2.5	11.0	13.0	10.0
Flexural strength	D790	psi	23,500	7,200	8,000	7,500
Flexural modulus	D790	psi	1,450,000	280,000	260,000	225,000
Izod impact strength, Notched	D256	ft•lbs/in	1.0	1.0	6.0	2.1
Izod impact strength, Un-Notched	D256	ft•lbs/in	3.5	13.5	No Break	—
Hardness—Shore D	D2240		—	—	68	—
Thermal						
Heat deflection temperature, @264 psi	D648	°F	215	185	160	176
Heat deflection temperature, @66 psi	D648	°F	—	—	190	—
Flammability rating	UL94		HB	HB	HB	—
Electrical						
Surface resistivity dry	D257	ohm/sq	$10^2 - 10^5$	$10^2 - 10^6$	$10^9 - 10^{11}$	3×10^{11}
Volume resistivity dry	D257	ohm/cm	$10^2 - 10^5$	$10^2 - 10^6$	$10^9 - 10^{11}$	—
Static decay, 15% RH	Mil-B-81705-B	seconds	<0.1	<0.1	<0.3	—

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. All values at 73°F (23°C) unless otherwise noted.