



RX[®] 1-501N

Description	RX [®] 1-501N is a mineral filled diallyl phthalate compound which conforms with the requirements of ASTM D5948 Type MDG
Available colors	Black, Blue
Available molding grades	Compression, Transfer, Injection
Form	Granular

Properties		International Units		English Units		Method
Physical	Specific Gravity	1.80		1.80		ASTM D792
	Apparent (Powder) Density	0.750	g/cm ³	6.3	lb/gal	ASTM D1895
	Molding Shrinkage	0.3 – 0.6	%	0.003–0.006	in/in	ASTM D955
	Post Shrinkage	-	%	-	in/in	ASTM D955
	Water Absorption		%		%	ASTM D570
Thermal	24 hour	-	%	-	%	ASTM D570
	48 hour	0.26	%	0.26	%	ASTM D570
	Temperature of deflection under load					
	As Molded	165	°C at 1.8 MPa	329	°F at 264 psi	ASTM D648A
	Post Baked	-	°C at 1.8 MPa	-	°F at 264 psi	ASTM D648A
	Thermal Conductivity	-	W/mK	-	W/mK	ASTM C518
	Oxygen Index	-	%	-	%	ASTM D2863
	UL Temperature Index	130	°C	266	°F	UL 746B
	UL-Flammability					
	3.2 mm	94HB		94HB		UL 94
1.6 mm	94HB		94HB		UL 94	
Mechanical	Coefficient of linear thermal expansion					
	parallel	25	10 E-6/°C	14	10 E-6/°F	ASTM E831
	perpendicular	-	10 E-6/°C	-	10 E-6/°F	ASTM E831
	Flexural Strength	110	MPa	16,000	psi	ASTM D790
	Flexural Modulus	11.7	GPa	1.7	Mpsi	ASTM D790
	Tensile strength	55	MPa	8,000	psi	ASTM D638
	Izod Impact Strength, notched	24	J/m	0.44	ft lb/in	ASTM D256A
	Compressive Strength	145	MPa	21,000	Psi	ASTM D695
	Rockwell Hardness					
	M Scale	-		-		
E Scale	-		-		ASTM D785	
Electrical	Dielectric Constant, 1 MHz, wet	3.6		3.6		ASTM D150
	Dissipation Factor, 1 MHz, wet	0.014		0.014		ASTM D150
	Arc Resistance	140	Seconds	140	Seconds	ASTM D495
	Dielectric Strength, ST, dry/wet	-/-	kV/mm	-/-	V/mil	ASTM D149
	60 Hz	-/14.8	kV/mm	-/376	V/mil	ASTM D149
Tracking Resistance	>600	V	>600	V	ASTM D3638 (IEC 112)	

Properties measured on compression molded ASTM specimens. Values are typical, not statistical minimums.

Contact your Sumitomo Bakelite representative for specifications and post baking recommendations.

ST = short time. SS = step-by-step. Wet = immersed in H₂O for 48 hrs. at 50 °C prior to testing.

Certification to ASTM D-5948 requires batch testing. All testing in accordance with ASTM D-5948. ASTM D-5948 supersedes MIL-M-14.

RoHS: RX[®] 1-501N is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: RX[®] 1-501N does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : RX[®] 1-501N does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA.

Revision Date: 7/2/2014. Shelf life 12 months when stored at 70 °F maximum.

The information presented in this document is provided in good faith, but no warranty is given or is to be implied regarding its accuracy or relevance to any particular application. Users must satisfy themselves regarding the suitability and safety of their use of the information and products in the application concerned.

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