



RX[®] 3-1-501N-P

Description RX[®] 3-1-501N-P is a mineral filled diallyl phthalate compound which conforms with the requirements of ASTM D5948 Type MDG-F.

Available colors Black, Blue

Available molding grades Compression, Transfer, Injection

Form Granular

Properties		International Units		English Units		Method	
Physical	Specific Gravity	1.83		1.83		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		ASTM D955	
	Post Shrinkage	-	%	-	in/in	ASTM D955	
	Water Absorption		%		%	ASTM D570	
	24 hour	-	%	-	%	ASTM D570	
	48 hour	0.30	%	0.30	%	ASTM D570	
Thermal	Temperature of deflection under load	As Molded	162	°C at 1.8 MPa	324	°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	94V-0		94V-0		UL 94
		1,6 mm	94V-0		94V-0		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		103	MPa	14,900	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		32	J/m	0.59	ft lb/in	ASTM D256A
Electrical	Compressive Strength		151	MPa	21,900	Psi	ASTM D695
	Rockwell Hardness	M Scale	-		-		ASTM D785
		E Scale	-		-		ASTM D785
	Dielectric Constant, 1 MHz, wet		3.7		3.7		ASTM D150
Dissipation Factor, 1 MHz, wet		0.016		0.016		ASTM D150	
Arc Resistance		135	Seconds	135	Seconds	ASTM D495	
Dielectric Strength, 60 Hz	ST, dry/wet	-15.7	kV/mm	-400	V/mil	ASTM D149	
	SS, dry/wet	-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[®] 3-1-501N-P is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: RX[®] 3-1-501N-P does not contain perfluorooctanesulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : RX[®] 3-1-501N-P 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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