



RX® 611

Description

RX® 611 is a fiberglass reinforced phenolic molding compound, with good dimensional stability and good strength at elevated temperatures. Meets ASTM D-5948 Type MFH.

Available colors

Black, Green

Available molding grades

Compression, Transfer, Injection

Form

Granular

PHENOLIC

Properties ¹		Typical Value	Unit	Method	
Physical	Specific Gravity	1.74	g/cm ³	ISO 1183	
	Apparent (Powder) density	0.80	g/cm ³	ISO 60	
	Molding shrinkage	0.20	%	ISO 2577	
	Post shrinkage	-	%	ISO 2577	
	Water absorption	0.04	%	ISO 62	
Thermal	Temperature of deflection under load	As Molded 190	°C at 1,8 MPa	ISO 75A	
		Post Baked > 282	°C at 1,8 MPa	ISO 75A	
	Thermal Conductivity	0.52	W/mK	ASTM C518	
	UL Temperature Index	180	°C	UL 746B	
	UL-flammability	3.2 mm	94 V-0		UL 94
		1,6 mm	94 V-0		UL 94
Coefficient of linear thermal expansion	parallel	17	10 E-6/°C	ASTM E831	
	perpendicular	-	10 E-6/°C	ASTM E831	
Mechanical	Flexural strength	130	MPa	ISO 178	
	Flexural modulus	16	GPa	ISO 178	
	Tensile strength	80	MPa	ISO 527	
	Izod impact strength, notched	2.5	KJ/m ²	ISO 180	
	Compressive strength	340	MPa	ISO 604	
	Rockwell Hardness, E Scale	100		ISO 2039/2	
Electrical	Dielectric Constant, 1 MHz, wet	-		ISO 93	
	Dissipation Factor, 1 MHz, wet	-		ISO 93	
	Arc Resistance	145	Seconds	ASTM D495	
	Dielectric strength, 60 Hz, wet	ST	13	kV/mm	ASTM D149
		SS	-	kV/mm	ASTM D149
Tracking resistance	200	V	IEC 112		

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

Contact your Sumitomo Bakelite representative for specifications and for 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® 611 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: RX® 611 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC: RX® 611 does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA..

Revision Date: 7/7/2014. Shelf life 1 year 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.

Sumitomo Bakelite North America, Inc.
24 Mill Street, Manchester, CT 06042-2316, USA
Tel. 1-800-243-7158, Fax 1-860-646-5503

Sumitomo Bakelite North America, Inc.
Corporate Office
46820 Magellan Drive, Suite C, Novi, MI 48377
Tel. 1-248-313-7000, Fax 1-248-8313-7027

www.sbhpp.com