



## RX<sup>®</sup> 525

<b>Description</b>	RX <sup>®</sup> 525 is a cellulose fiber reinforced phenolic novolac molding compound. This material is recommended for parts requiring moderate toughness. It is designed to meet the requirements of ASTM D-5948-96, Type CFG. (Replaces Military Specification MIL-M-14H.)
<b>Available colors</b>	Black
<b>Available molding grades</b>	Compression, Transfer, Injection
<b>Form</b>	Pellet

**PHENOLIC**  
**NOVOLAC**  
**REINFORCED**

Properties		International Units	English Units	Method
Physical	Specific Gravity	<b>1.39</b>	<b>1.39</b>	ASTM D792
	Apparent (Powder) density	<b>0.5</b> g/cm <sup>3</sup>	<b>4.2</b> lb/gal	ASTM D1895
	Molding shrinkage	<b>0.2</b> %	<b>0.0020</b> in/in	ASTM D955
	Post shrinkage	- %	- in/in	ASTM D955
	Water absorption	24 hour <b>0.3</b> % 48 hour <b>1.7</b> %	<b>0.3</b> % <b>1.7</b> %	ASTM D570 ASTM D570
Thermal	Temperature of deflection under load	As Molded <b>165</b> °C at 1.8 MPa Post Baked - °C at 1.8 MPa	<b>329</b> °F at 264 psi - °F at 264 psi	ASTM D648A ASTM D648A
	Thermal Conductivity	<b>0.54</b> W/mK	W/mK	ASTM C518
	UL Temperature Index	<b>150</b> °C	<b>302</b> °F	UL 746B
	UL-flammability	3.2 mm <b>94V-0</b> 1.6 mm <b>94HB</b>	<b>94V-0</b> <b>94HB</b>	UL 94 UL 94
	Coefficient of linear thermal expansion	parallel <b>43</b> 10 E-6/°C perpendicular <b>52</b> 10 E-6/°C	<b>24</b> 10 E-6/°F <b>29</b> 10 E-6/°F	ASTM E831 ASTM E831
	Mechanical	Flexural strength	<b>69</b> MPa	psi
Flexural modulus		<b>8.3</b> GPa	<b>1.6</b> Mpsi	ASTM D790
Tensile strength		<b>41</b> MPa	<b>6000</b> psi	ASTM D638
Izod impact strength, notched		<b>35</b> J/m	<b>0.65</b> ft lb/in	ASTM D256A
Compressive strength		<b>169</b> MPa	<b>24,500</b> Psi	ASTM D695
Rockwell Hardness		M Scale - E Scale <b>75</b>	- <b>75</b>	ASTM D785
Electrical	Dielectric Constant, 1 MHz, wet	-	-	ASTM D150
	Dissipation Factor, 1 MHz, wet	-	-	ASTM D150
	Arc Resistance	<b>70</b> Seconds	<b>70</b> Seconds	ASTM D495
	Dielectric strength, 60 Hz, dry	ST <b>2.0</b> kV/mm SS <b>1.0</b> kV/mm	<b>50</b> V/mil <b>25</b> V/mil	ASTM D149 ASTM D149
	Tracking resistance	- V	- 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 H<sub>2</sub>O 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<sup>®</sup> 525 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

PFOS: RX<sup>®</sup> 525 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

REACH/SVHC : RX<sup>®</sup> 525 does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA..

Revision Date: 7/8/2014. 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.

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