

# MATERIAL DATASHEET

# RULON® 142 / 142S / 242

**Features:** Blue-Green, Low wear, Good dimensional stability, Proprietary custom PTFE

**Benefits:** High thermal dissipation  
Excellent mechanical properties

**Working Temperature Range:**  
-240°to +288°C [-400°to +550°F]

Properties	Test Methods	Typical Values	Units
<b>PHYSICAL</b>			
Specific Gravity	ASTM D792	3.11	--
Hardness	ASTM D785	57 – 67	Shore D
Water Absorption, 24hr	ASTM D570	0	%
<b>MECHANICAL</b>			
Tensile Strength	ASTM D4894	21.4 [3,100]	MPa [psi]
Elongation	ASTM D4894	200	%
Deformation under load <sup>2</sup>	ASTM D621	3.0	%
<b>THERMAL</b>			
Flammability	ASTM D635	Non-flammable	m/s [in/min]
Linear Coefficient of Thermal expansion 26°to 149°C [78°to 300°F] Diameter	ASTM D696	14.6/11.5 [8.1/6.4]	m/m/°C x 10 <sup>-5</sup> [in/in/°F x 10 <sup>-5</sup> ]
<b>ELECTRICAL</b>			
Volume Resistivity	ASTM D257	3.9 x 10 <sup>14</sup>	Ohm·cm
Surface Resistivity	ASTM D257	5.2 x 10 <sup>13</sup>	Ohm·sq
<b>TRIBOLOGICAL</b>			
Coefficient of Friction	-	0.15 - 0.30	-
<b>OPERATING LIMITS MATING SURFACE</b>			
Maximum Pressure	-	6.9 [1,000]	MPa [psi]
Maximum Velocity (no pressure)	-	2 [400]	m/s [ft/min]
Maximum PV	-	0.35 [10,000]	MPa x m/s [psi x ft/min]
Rockwell / Brinnell Scale	-	Rc 35/327	Minimum

1. All testing is performed at room temperature unless otherwise specified. 2. Deformation under load was tested at 10.3 MPa [1,500 psi] for 24 hrs. The table above represents typical values, intended for reference only. They should NOT be used as a basis for design specifications or quality control. Rulon® is a registered trademark. © 2024 Omniseal Solutions.