

PROFESSIONAL PLASTICS, INC.

www.professionalplastics.com

MC501CD R2 Material Data Sheet – PROFESSIONAL PLASTICS, INC.

MC501+R2 (electrically conducting) monocast Nylon feature a proprietary static control additive.

Properties	Test Methods	Units	Values
Density	ASTM D-792	–	1.20
Tensile Strength at 23°C	ASTM D-638	MPa	68
		{kgf/cm ² }	{700}
Tensile Elongation at 23°C (at break)	ASTM D-638	%	10
Tensile Modulus at 23°C	ASTM D-638	MPa	–
		{10 ³ kgf/cm ² }	–
Compressive Strength at 23°C (5% Deformation)	ASTM D-695	MPa	98
		{kgf/cm ² }	{1,000}
Compressive Modulus at 23°C	ASTM D-695	MPa	4,210
		{10 ³ kgf/cm ² }	{43}
Flexural Strength at 23°C	ASTM D-790	MPa	117
		{kgf/cm ² }	{1,200}
Flexural Modulus at 23°C	ASTM D-790	MPa	4,110
		{10 ³ kgf/cm ² }	{42}
Izod Impact (Notched)	ASTM D-256	J/m	35
		{kgf-cm/2.54cm}	{9}
Rockwell Hardness at 23°C	ASTM D-785	R scale	119
Heat Deflection Temperature	ASTM D-648	°C	200
1.820MPa {18.6kgf/cm ² }			
0.445MPa {4.6kgf/cm ² }	ASTM D-648	°C	215
Coefficient of Linear Thermal Expansion	ASTM D-696	×10 ⁻⁵ /°C	8.0
Continuous Service Temperature	–	°C	120

Water Absorption Immersion at 23°C			
(24h in water)	ASTM D-570	%	0.4
(Saturation)			5.2
Volume Resistivity at 23°C	ASTM D-257	$\Omega \cdot m$	$1 - 10^2$
		{ $\Omega \cdot cm$ }	{ $10^2 - 10^4$ }
Dielectric Strength	ASTM D-149	kV/mm	–
Flammability	UL94	–	(HB)

*The data in the table shows the representative data, though they are not the guaranteed ones.

*Combustion property is presented according to UL standard evaluation test and data presented by raw material producers. No products need caution as a material.

Call Professional Plastics at (888) 995-7767 or E-Mail: sales@proplas.com
Asia Customers Call + 65-6266-6193 or E-Mail: asia-sales@proplas.com
Order Online at www.professionalplastics.com