

E35B+ CNT Dispersion in BR-952

APPLICATIONS

- ESD 3D printing resins
- Low surface resistivity coatings and adhesives
- Conductive inks

FEATURES

- Stable dispersion of discrete nanotubes
- Promotes electrostatic dissipation in UV-curable formulations.
- No degradation of mechanical properties

FEATURES

- Capable of achieving 10^4 - 10^9 Ω /sq resistivity
- Easy addition to a formula without high shear mixing
- Provide carbon content with no trails.

E35B+ is a stable dispersion of discrete, dispersed, and functionalized carbon nanotubes (D'Func) in urethane dimethacrylate (UDMA), BR-952. The Masterbatch can be used in rigid, high tensile strength SLA, DLP, or jettable resins to provide conductivity and decreased resistivity. When compared to FDM-printed ESD parts, ESD resins produced with E35B+ can achieve fully isotropic conductivity with high resolution and isotropic mechanical properties.

UNCURED PROPERTIES

Property	Value
Viscosity, cps (60°C)	Thixotropic paste
Appearance	Black Paste
Refractive Index (25°C)	0
Specific Gravity, (20°C)	1.08

CURED MECHANICAL PROPERTIES

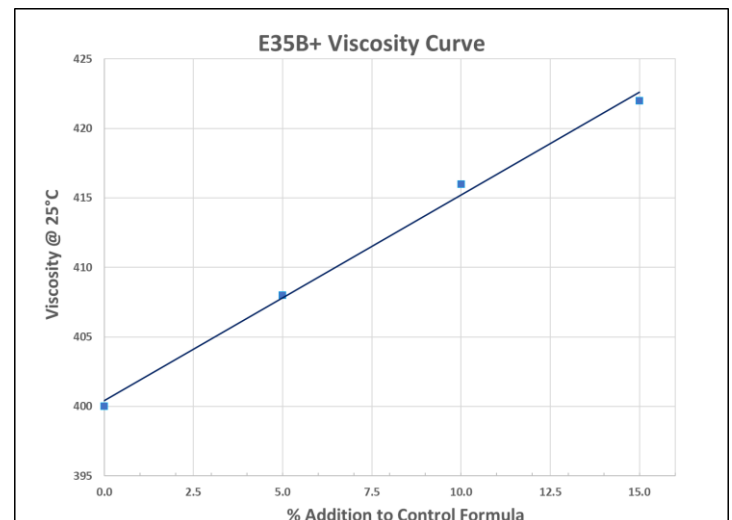
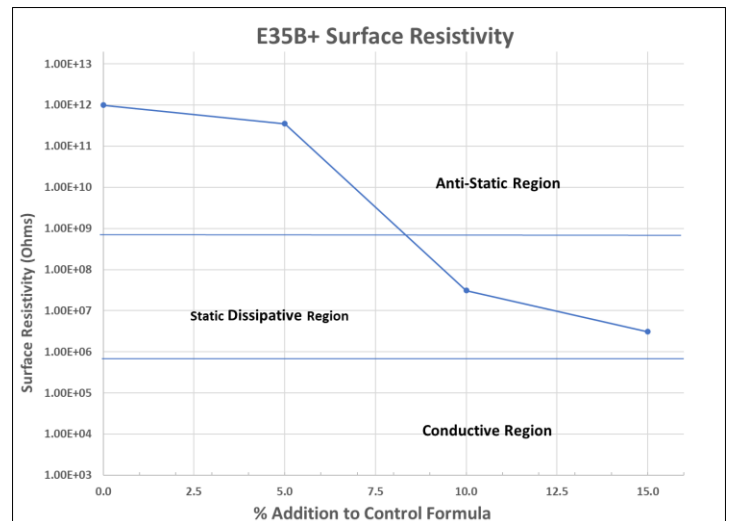
Property	Control	15% E35B+
Tensile Strength, psi**	9,600	10,800
Elongation, %**	7.0	4.3
Elastic Modulus, ksi**	386	420
Durometer Hardness	87D	90D
MEK Double Rubs (#)	>200	>200
T _g (DMA) = Not Measured		

** Per ASTM D882

TYPICAL FORMULATIONS

Test Formulation	Control	15% E35B+
BR-952	66.26	51.5%
BR-371MS	7.00	6.9%
HEMA	25.68	25.7%
E35B+	0.00	14.9%
TPO	1.00	1%
OB	0.06	-
Viscosity (cps), 25°C *	400	428

* Brookfield – CAP 2000+ @ 25°C



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This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from skin with soap and water. Never use organic solvents to remove material from skin and eyes. For more information on the safe handling of this material, please refer to the I Safety Data Sheet before use.

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