



OVERVIEW

With over 20 years of expertise, Lubrizon uses exceptional talent and resources worldwide to produce a wide variety of durable, highly-flexible, permanent and humidity resistant static-control polymers for hose/spiral wound hose in cleanroom and clean manufacturing applications. Clean manufacturing environments include, PCB assembly, plastics injection molding, extrusion and powder applications.

KEY PROPERTIES AND BENEFITS

- Permanent ESD and humidity protection
- Low outgassing
- No carbon particulates
- Non-corroding and contaminating (low ionics)
- ESD consistency (no “hot spots”)
- Colorable and UV-resistant
- High resistance to puncturing/tearing
- Good abrasion resistance
- Toughness/Durometers ranging from 82 – 91 Shore A
- Vacuum Ratings up to 28 in Hg
- Good adhesion to reinforcement - metal wire or Plastic Ribbing (PVC, ABS, etc.)
- Processing ease (Extrude on existing tooling for thermoplastic polyurethane [TPU] compounds)

*Resin must be desiccant dried prior to extruding

AVAILABLE PRODUCTS:

Products	Stat-Rite® S-1100	Stat-Rite® S-1107	Stat-Rite® E-1140	Stat-Rite® E-1150	Stat-Rite® S-1180	Stat-Rite® S-1110
Surface Resistance ANSI ESD S11.11 (Ohms)	5 x 10 ⁹	4.8 x 10 ⁷	3 x 10 ¹⁰	5.0 x 10 ¹⁰	4 x 10 ⁶	5 x 10 ⁶
Volume Resistance ANSI ESD S11.12 (Ohms)	5 x 10 ⁹	2.3 x 10 ⁷	5 x 10 ¹⁰	5.0 x 10 ¹⁰	NA	NA
Static Decay Rate 5000–50V FTMS 101C (sec.)	0.01	0.01	0.9	1.3	0.1	0.1
ESD permanence	Yes	Yes	Yes	Yes	Yes	Yes
Color	Light Blue	Yellow Tint	Yellow Tint	Yellow Tint	Yellow Tint	Yellow Tint
Clarity	Clear	Clear	Clear	Clear	Clear	Clear
Hardness Shore A scale	90	83	82	88	NA	NA
Tensile Strength @ Break ASTM D412	3800 psi (26 MPa)	1670 psi (32 MPa)	4300 psi (30 MPa)	4700 psi (32 MPa)	700 (5)	800 (6)
Elongation	450	695	760	760	>500	>500
Specific Gravity	1.16	1.21	1.2	1.2	1.2	1.2
FDA Compliance	No	No	21 CFR175.105	21 CFR175.105	No	No
EU Compliance	No	No	No 110/2011	NA	NA	NA
Comments	Very good ESD performance for high pressures	Very good ESD performance for lower pressures	Good ESD performance with FDA compliance	Good ESD performance with FDA compliance	Inherently Static Dissipative Masterbatch* for TPU	Inherently Static Dissipative Masterbatch* for Polyethylene

*Stat-Rite® S-1180 and Stat-Rite® S-1110 are masterbatch compounds when added at levels between 15-30% by weight to TPU or EVA or Polyethylene will provide permanent ESD performance to the compound

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**ADVANCING MATERIALS.
ELEVATING PERFORMANCE.**

