

ESD Safe Toothbrush-Style Plastic Brushes

These static dissipative brushes are ideal for use in most any situation where Electro-Static Discharge is a concern and/or where antistatic brushes are required. This would include cleaning, scrubbing or dusting sensitive electronic circuitry in any of today's sophisticated ESD workstations and/or in potentially explosive applications where a static discharge spark could be a serious problem. Destructive surface charges do not build up, since they quickly and safely dissipate through the grounded technician in a controlled manner during use. The brushes are compliant with both EN 61340-5-1 and the EOS/ESD Association Inc. recommendations for static controlled environments.



Available in 3 bristle stiffness options (medium-soft, medium and stiff). Each includes a bent conductive plastic handle with finger grips and hang-up hole. The handle is securely staple set with yellow abrasion resistant static dissipative Nylon filament in a 3 row (7-6-7) staggered tuft pattern. Each handle displays the universal ESD safe logo in bright yellow epoxy ink.

Part #	Stiffness	Fill Material	Trim	3 Rows	Handle (L x W)	Brush Face (L x W)
21N-ESD-LT	Med-Soft	Yellow .010" Static Dissipative Nylon 6.12	3/4"	7-6-7	7-3/16" x 7/16"	1-3/8" x 1/4"
21N-ESD	Medium	Yellow .010" Static Dissipative Nylon 6.12	7/16"	7-6-7	7-3/16" x 7/16"	1-3/8" x 1/4"
21N-ESD-016	Stiff	Yellow .016" Static Dissipative Nylon 6.12	7/16"	7-6-7	7-3/16" x 7/16"	1-3/8" x 1/4"

Technical Information

Handle Material: Carbon filled Polypropylene, Black, Non-slothing, Electrically Conductive

Electrical Resistance: Per ANSI/ESDA STM11.12 Volume Resistance test standards for static dissipative materials:

Required: 1×10^4 to $1 \times 10^{11} \Omega$ (ohms)

Typical: 1×10^4 to $1 \times 10^5 \Omega$ (ohms)

Bristle Material: Non-carbon filled Nylon 6.12, Yellow, Non-slothing, Static Dissipative

Electrical Resistance: Per ANSI/ESDA STM11.12 Volume Resistance test standards for static dissipative materials:

Required: 1×10^4 to $1 \times 10^{11} \Omega$ (ohms)

Typical: 1×10^9 to $1 \times 10^{10} \Omega$ (ohms)

Brush Assembly: Resistance measured with the brush face flat on a conductive plate and through the handle.

Electrical Resistance: Per IEC 61340-5-1 Resistance to Ground Point (R_G), for hand held brush.

Required: $R_G < 1 \times 10^{12} \Omega$ (ohms)

Typical: 1×10^9 to $1 \times 10^{10} \Omega$ (ohms)

Static Decay: Static Decay is the time required to dissipate 90-99% of an initial charge of +/- 5000V.

Method: A charge is induced on to the sample via electrode contact, and then grounded. An electronic voltmeter makes electrostatic (non-contact) measurement of the charge on the sample.

Results: Charge Decay at 70°F, 29% r.h.

5000V → 50V = 2.06 Sec., -5000V → -50V = 1.53 Sec. (1.8 Seconds Average)

Max. Use Temps: 175°F Continuous, 250°F Short Term

Declarations: RoHS 3 Compliant
REACH Compliant

Compatible Sterilization: Steam Autoclave
EtO (Ethylene Oxide)



Note: We believe all information on this document to be true and reliable but make no warranty to its correctness and assume no liabilities.

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