

## Coating data chart



	Parylene	Nylon	Electrostatic Epoxy	Liquid Epoxy
Layer thickness	~0.013 mm	0.2-0.5 mm	0.1-0.3 mm	0.1-0.3 mm
UL number	UL94-V-0 E316885	UL94-V-2 E45228	UL94-V-0 E228348	UL94-V-0 E257126
Max. working temperature	90°C	200°C	200°C	200°C
Isolation voltage $V_{DC}$	>1000V (~12 $\mu$ m)* >2000V (~25 $\mu$ m)* (* ) layer thickness	1000V 4 $\leq$ OD < 12 1500V 12 $\leq$ OD < 20 2000V OD $\geq$ 20	1000V 10 $\leq$ OD < 12 1500V 12 $\leq$ OD < 20 2000V OD $\geq$ 20	1000V 4 $\leq$ OD < 12 1500V 12 $\leq$ OD < 20 2000V OD $\geq$ 20
Roughness (comparative)	low	high	medium	medium
Advantages	-stress free -thin layer -clean -smooth and uniform	-high temperature -high isolation voltage	-good adherence -clean -high working temperature	-low stress -clean -good adherence -high working temperature -available for large toroids
Disadvantages	Only small toroids (OD < 10mm)	-high stress -thick layer	-not suitable for 3E15 -not for large toroids	-higher cost than electrostatic
Optimal application	Up to OD < 10mm	10 < OD < 36	10 < OD < 51	-iron powder toroids -OD < 10 and OD $\geq$ 51 -suitable for 3E15
Coating generic type	paraxylene polymer	Polyamide 11	Electrostatic Epoxy-Polyamide	Epoxy-Polyamide
Melting point	175°C (few seconds)	184-186°C	---	---

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