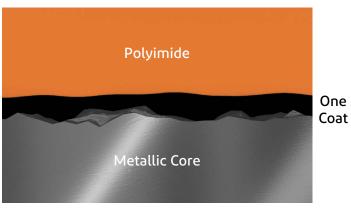


MEGUM[™] Improves Communication through Advanced Polyimide Adhesion

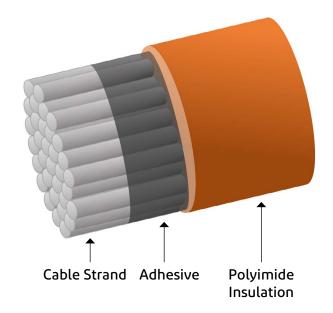
Electronics and Cable Construction

Polyimides have been utilized in the electronic and communication industries for decades for their insulative properties. These materials can be applied to cable constructions with standard pressure sensitive adhesives, or simply wound around the metallic core. However, these basic types of insulation limit the lifetime and durability of the wire assembly in tough environments or applications with repetitive movement.

To gain longer life for high quality electronics and cable assemblies, a high strength bond between the polyimide insulation and core is required. DuPont $^{\text{M}}$ MEGUM $^{\text{M}}$ specialty adhesives provide this adhesion at levels exponentially greater than standard practices.



Microscopic Bondline



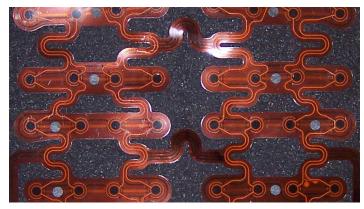
The most apparent change from simple wrapping to a fully-bonded insulation is the elimination of peel-induced insulation gaps which are known to create shorts causing signal or power disruption or other communication dysfunction.

MEGUM™ specialty adhesives utilized in these applications are extremely thin viscosity one coat systems that can be applied through standard dip-coat processes prior to polyimide film wrapping. Final cure of this adhesive is completed through limited thermal exposure, typically already utilized in the insulating process.

Advancing Communication

MEGUM™ specialty adhesives are proven, effective bonding agents for communication cables as well as computer board assemblies. A unique advantage of utilizing a true bonding adhesive is the ability to remove any micro-etch process in production, further advancing the end product to support high communication frequencies or bandwidths.





Circuit board utilizing polyimide insulation

Sustainably Effective

The DuPont Adhesive Development Team has long been a front runner in developing sustainable adhesives. The **MEGUM™** product line boasts one of the broadest portfolios of water-based adhesive solutions currently available. Water-based adhesives such as **MEGUM™** W-3295 are comprised of 99% water, without negatively effecting bond strength, coverage, or long-term durability when compared to a pre-existing solvent-based material.

Product	Base	Flexibility	Features	Coverage/Gal
MEGUM W-3295	Water	High	Low Interference	4,500 sq ft
MEGUM W-3000	Water	Medium	Strippable Cable Capable	1,500 sq ft
MEGUM 3290-1	Ethanol	High	Highest Adhesion	1,500 sq ft

Source: DuPont

dupont.com



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