

CELANESE ZYTEL® HTN OFFERS THE FIRST THERMOPLASTIC SOLUTION FOR DIP SOLDERING ON COIL FORMS AND TRANSFORMERS



Zytel® HTNFR42G45NHSR is the first thermoplastic solution that can pass the industrial dip soldering process at 400-420°C for two to three seconds. This new product means designers can make components smaller and lighter, as well as enable a more efficient automation assembly process.

HIGH PERFORMANCE PLUS SUSTAINABILITY

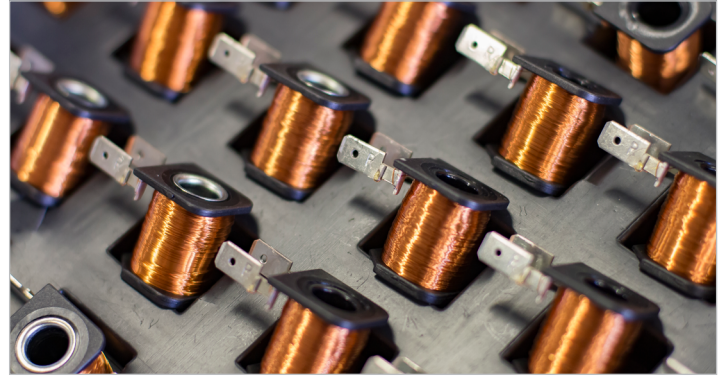
This non-halogenated flame retardant 0.4mm V0, bio-based solution offers high performance and helps manufacturers achieve sustainability goals. Its superior strength and elongation enable higher yield rates and design flexibility.

Zytel® HTNFR42G45NHSR outperforms phenolic resins in many ways:

- Strength: +30%
- Elongation: +80%
- CTI: +200%
- Dielectric Strength: +200%
- Density: -11%
- No Flash
- Recyclability

Zytel® HTNFR42G45NHSR is a recyclable and regrindable solution that cuts down on materials and energy used as well as waste, making it more sustainable.

Plus, it's listed as a ground insulation material in Celanese's newly awarded EIS class F system (CRZ200).

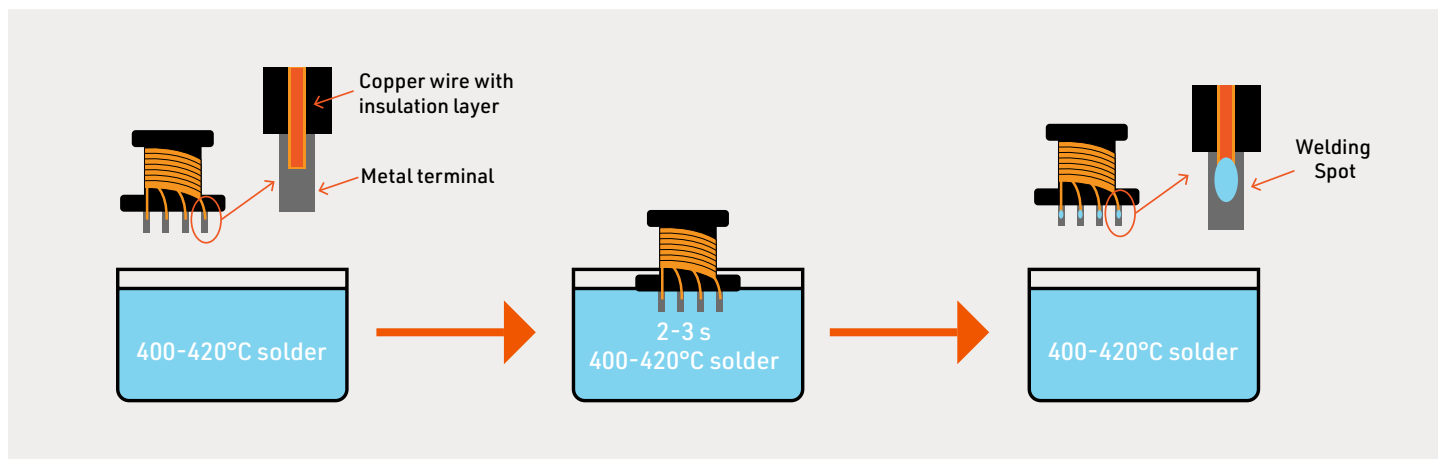


THE ZYTEL® HTN DIFFERENCE: BETTER PRODUCTIVITY, MINIATURIZATION

Currently, phenolic resin (thermoset material) is commonly used for coil forms and transformers due to its good heat resistance. However, phenolic resin has disadvantages: it can't be recycled or reused, it needs extra processing steps to remove the flash, it cracks easily, its lower CTI does not allow for miniaturization, and its low dielectric strength is not suitable for high-voltage applications.

Zytel® HTNFR42G45NHSR is a better choice because of its properties that allow it to:

- Pass dip soldering process without failure
- Minimize environmental waste and impact
- Reduce production cycle time
- Advance design miniaturizations



Source: Celanese

Zytel® HTNFR42G45NHSR is the first thermoplastic solution to pass the industrial dip soldering process at 400-420°C for two to three seconds.

IMPROVED SAFETY

Zytel® HTNFR42G45NHSR offers improved safety and meets UL requirements with the following properties:

- V-0 @ 0.4mm
- CTI/PTI = 600V (PLC = 0)
- GWIT 775°C @ 0.75mm
- GWFI 960°C @ 0.75mm
- RTI = 140°C / 115°C / 125°C (Elec/Imp/Str) @ 0.75mm

DISCOVER MORE

For more information about Zytel® HTNFR42G45NHSR solutions for dip soldered coil forms and transformers, contact your Celanese representative.

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