ARLON ELECTRONIC MATERIALS

# ELECTRONIC MATERIALS - Product Listing & Typical Properties

| Resin | Product Description | Tg (˚C) | Z Axis Expansion (%) | UL-94 Rating | Td 5% (˚C) | $H_2O$ Absorp (%) | Tc (W/m-K) | IPC4101 Class | Comments |
|---|---|---|---|---|---|---|---|---|---|
| **Polyimide Products** | | | | | | | | | |
| 33N | Flame Retardant Polyimide | 250 | 1.2 | V0 | 389 | 0.21 | 0.20 | GIL /40 /41 | Max Flame Retardance |
| 35N | Flame Retardant Polyimide | 250 | 1.2 | V1 | 407 | 0.26 | 0.20 | GIL /40 /41 | Reduced Cure Time |
| HF-50 | Powdered Poly Hole Fill Compound | 250 | 0.55 | n/a | >400 | 0.40 | 0.50 | N/A | Hole/Via Fill Compound |
| 84N | Filled Polyimide Prepreg | 250 | 1.0 | Meets HB | 407 | 0.30 | 0.25 | GIL /40 /41 | For Via/Clearance Hole Filling |
| 85N | High Temp Polyimide | 250 | 1.2 | HB | 407 | 0.27 | 0.20 | GIL /40 /41 | Optimum Long Term Stability |
| 85HP | High Performance Polyimide | >250 | 1.0 | Meets HB | 430 | 0.32 | 0.50 | GIL /40 /41 | Tc (W/mK) is 2x Polyimide |
| | | | | ** PolyimideTg measured by Thermomechanical Analysis (TMA)* | | | | | |
| **Low Flow Products** | | | | | | | | | |
| 37N | Low Flow Polyimide Prepreg | 200 | 2.3 | Meets V0 | 340 | <1.00 | 0.30 | GIJ /42 | Rigid Flex Applications |
| 38N | 2nd Gen Low Flow Polyimide Prepreg | 200 | 1.5 | Meets V0 | 330 | <1.00 | 0.30 | GIJ /42 | Enhanced Rheology Rigid Flex |
| 47N | Modified Epoxy Low Flow | 135 | 3.5 | V0 | 315 | 0.10 | 0.25 | GFG /21 | Heat Sink Bond, Low Temp Cure |
| 49N | Multifunctional Epoxy Low Flow | 170 | 3.1 | V0 | 303 | 0.10 | 0.25 | GFG /26 | Rigid-Flex, Heat Sinks |
| 51N | Lead-Free Epoxy Low Flow | 170 | 2.6 | V0 | 368 | 0.15 | 0.25 | GFG /126 | Lead-Free Solderable, Rigid-Flex |
| **Epoxy Products** | | | | | | | | | |
| 44N | FIlled Epoxy Prepreg | 170 | 2.2 | V0 | >300 | 0.10 | 0.30 | GFG /98 | For Via/Clearance Hole Fill |
| 45N | Multifunctional Epoxy | 175 | 2.4 | V0 | >300 | 0.10 | 0.25 | GFG /26 | High Layer Count MLBs |
| **Controlled Thermal Expansion/SMT** | | | | | | | | | |
| 45NK | Woven Aramid Reinforced Epoxy | 170 | 2.8 | V0 | >300 | 0.80 | 0.22 | AFN /50 | Kevlar® X-Y CTE of 5-7 ppm/°C |
| 55NT | Epoxy Nonwoven Aramid | 170 | 3.5 | V0 | 368 | 0.30 | 0.20 | BFG /55 | X-Y CTE of 6-9 ppm/°C |
| 85NT | Polyimide Nonwoven Aramid | 250 | 2.3 | Meets HB | 426 | 0.60 | 0.20 | BIL /53 | X-Y CTE of 7-9 ppm/°C |
| 85N/CIC | Polyimide Clad with CIC | 250 | 1.5 | HB | 407 | 0.20 | 0.27 | GIL /40 /41 | CIC = Copper-Invar-Copper |

## Additional Product Information

Reverse Treated and Double Treated Foils are available upon request
Thin copper foils are available for ultra fine-line applications
50 or 100 Ohm/Square Omega-Ply® or Ticer resistive foils are available for manufacturing Etched Planar Resistors
All products are manufactured using E-Type Fiberglass unless otherwise specified

Arlon Electronic Materials • 9433 Hyssop Drive • Rancho Cucamonga, CA 91730 • Phone: (909) 987-9533 • Fax: (909) 987-8541



 