

DESCRIPTION

U-835 is a urethane resin functionalized with an acrylate and a methacrylate. This low viscosity urethane makes it an ideal candidate for a base resin in an adhesive formulation. The urethane linkages help to form a very tough cross-linked film with excellent adhesion on a variety of substrates including metal, polyimide, silicon, and ceramic. The acrylate/methacrylates curable ends make it ideal for both thermal cure via peroxides or UV cure through photo initiators.

HIGHLIGHTS

| | |
|-----------------------|--------------------------|
| • Excellent toughener | • Hydrophobic |
| • Fast cure | • Good thermal stability |
| • Flexible | |

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

| PROPERTY | METHOD | RESULT |
|---|--------------------------|--|
| Appearance at Room Temperature | Visual | Yellow liquid |
| Viscosity @ 25°C (typical) | Haake Rheometer | 3,000 cps |
| Density | | 1.0 g/cc |
| Functionality | | 2 |
| Molecular Weight | | 835 |
| Weight Loss @ 300°C | TGA | < 5.0% |
| Decomposition Temperature | TGA | 350°C |
| Recommended Storage Temp | | 10°C or below |
| PHYSIOCHEMICAL | | |
| Glass Transition Temperature cured with 2% Dicumyl Peroxide | TMA DMA | 18°C |
| Coefficient of Thermal Expansion cured with 2% Dicumyl Peroxide | TMA | α_1 103 ppm/°C α_2 201 ppm/°C |
| Dynamic Tensile Modulus Cured with 2% Dicumyl Peroxide | Rheometrics Rheometer | 2,400 MPa 620 MPa 132 MPa |
| | | -65°C 25°C 150°C |

Data is for reference only and may vary depending on testing method used.

RECOMMENDED FORMULATION USE:

U-835 is recommended for use as a base resin or additive for adhesives designed for metal substrates. The acrylate/methacrylate end groups allow for fast cure with excellent toughness. The resin has shown to have superior electrical and thermal conductivity in various conductive formulations.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

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