

## 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
- Fast cure
- Flexible
- Hydrophobic
- Good thermal stability

## TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Light tan liquid
Viscosity @ 25°C (typical)	Haake Rheometer	3,000 cP
Density		1.0 g/cc
Functionality		2
Molecular Weight		835 daltons
Weight Loss @ 300°C	TGA	< 5.0%
Decomposition Temperature	TGA	350°C
Recommended Storage Temp		10°C or below
<b>PHYSIOCHEMICAL</b>		
Glass Transition Temperature cured with 2% Dicumyl Peroxide	TMA DMA	18°C
Coefficient of Thermal Expansion cured with 2% Dicumyl Peroxide	TMA	$\alpha_1$ 103 ppm/°C $\alpha_2$ 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

Customer Support

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