NEXUS UV110

Technical Data Sheet

Nexus UV110 is an epoxy-based, cationic-curable adhesive and/or sealant. This product is activated by exposure to medium intensity UV radiation resulting in a high strength, chemical resistant, low outgassing polymer system capable of surviving exposure up to 155°C. This product requires direct UV exposure during cure. Because of the variability of different UV light sources, it is suggested that the user test and specify UV intensity and exposure time. Low intensity UV light sources (200 mw/cm2) may require as much as a 30 second exposure time. Ultimate glass transition temperatures (135C) and chemical resistance can be best realized when using a thermal post cure of 1 hour at 135C.

APPLICATIONS	FEATURES	SUBSTRATES
• ELECTRONICS	• CHEMICAL RESISTANCE	• METALS
• ENCAPSULATION	• HIGH HARDNESS	• CERAMICS
• SEALANT	• FAST UV CURE	• GLASS

Typical Properties of Uncured Material*

Chemical Class	UV Epoxy
Color	Clear
Viscosity @25°C, Spn5 @10RPM, cps	12,000-15,000
Specific Gravity	1.17
Cleanup Solvent	Isopropyl alcohol

UV Light Cure Guidelines*

Recommended Curing Spectrum	UVA
Thermal Post Cure at 135°C, hours	1

Heat is also an important component with UV cure, and different systems produce different heat outputs. Cure testing was done in an open system and results will vary with application. Consequently, Resin Designs recommends that curing is discussed with our Technical staff to ensure the exact customer process being used will meet the coating cure requirements. After UV exposure and return to room temperature the coating should be tack free.

Nexus UV110 was designed to be cured using a microwave UV oven. Arc and LED systems may cure Nexus UV110; however, care must be taken during the equipment selection process to ensure minimum dosage and irradiance values obtained will properly cure the coating. Because of the variations possible in curing equipment type and configuration, it is strongly recommended that you contact Resin Designs Technical Support to discuss your equipment and process in detail.

Typical Properties of Cured Material*

Durometer, Shore D	80
Glass Transition Temperature (Tg), °C	135
Operating Temperature Range, °C	-40 to 155

***All properties given are typical values and are not intended for use in preparing specifications.**

Storage

Keep stored between 8°C and 28°C in tightly closed, light-blocking containers away from direct sunlight. Keep from freezing. Please refer to product labeling for shelf-life information. Consult SDS for safe handling recommendations.

RESIN DESIGNS MAKES NO EXPRESSED OR IMPLIED REPRESENTATIONS OR WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WITH RESPECT TO THIS PRODUCT AND GUARANTEES NO PARTICULAR OUTCOME OR RESULT FROM ITS USE. RESIN DESIGNS' LIABILITY TO CUSTOMER WITH RESPECT TO THIS PRODUCT SHALL IN NO EVENT EXCEED THE AMOUNT PAID BY CUSTOMER FOR IT. APPLICATION OF THIS MATERIAL SHOULD COMPLY WITH LOCAL AND NATIONAL HEALTH AND SAFETY REGULATIONS. PLEASE CONSULT OUR WEBSITE FOR THE CURRENT REVISION OF THIS DOCUMENT.

Resin Designs 11 State Street, Woburn, MA 01801 **www.resindesigns.com** **781-935-3133**