

# **TECHNICAL BULLETIN**

## FLASHBOND<sup>™</sup> UV-5608DC

UV/LED CURE EPOXY ADHESIVE

**FLASHBOND<sup>TM</sup> UV-5608DC** is an innovative light cure epoxy adhesive. It has unique features that allow for fast processing and fixturing of parts. Once the adhesive has been activated with UV light, it has set open time that allows for assembly of parts. The product continues to cure at room temperature or rapidly cures when exposed to low temperature heat. The cured product exhibits low shrinkage and excellent thermal, water and chemical resistance. Typical applications include bonding of optics, connectors, fibers, lenses, prisms and other electronic components where low shrinkage and low outgassing are required.

### TYPICAL HANDLING PROPERTIES:

Chemical Type	Cationic Epoxy
Viscosity at 25°C, cps	4000-7000
Specific Gravity, 25°C	1.12

#### **Recommended Curing Conditions:**

Pre-activated @ 100-150 mW/cm<sup>2</sup>, measured @ 405 nm or 365 nm for 6-8 seconds resulting in an open time of 45-60 seconds. Full cure will follow in 24-48 hrs.

For full cure (no open time), increase cure time to 20-30 seconds or increase intensity to 250-400  $mW/cm^2$  and cure for 5-8 seconds/

#### TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:

(Tested @ 25°C unless otherwise indicated)

Color Handrage Share D	Translucent	
Hardness, Shore D	15	
Water Absorption (24 hr @ RT), %	0.15	
Linear Shrinkage, %	0.8	
Elongation at break, %	7.6	
Lap Shear Strength Al/Al, psi	2500	
Tensile Strength, psi	3000	
Service Temperature range, °C	-55 to 150	
Glass Transition Temperature, °C	81	
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> /°C		
Below Tg	59	
Above Tg	>120	
Dielectric Strength, Volts/mil	420	
Dielectric Constant at 1 kHz	4.14	
Dissipation Factor at 1 kHz	0.02	
Volume Resistivity (ohm-cm)	$1.0 x 10^{14}$	

#### Heat aging

Aged at temperature indicated and tested at 25°C



#### **Strength Testing**

Strength build up over time and tested at 25°C



**DISCLAIMER:** All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.