

SECURE 8260 series

Photopolymer introduces **SECURE**, a comprehensive line of advanced ultraviolet and visible light cure adhesives utilizing the latest resins and additives. As companies continue to introduce compact products with ever decreasing size and profiles, this miniaturization trend introduces delicate components and restricts the use of mechanical assembly. **SECURE 8260** series are formulated for structural bonding of such intricate and delicate components. **SECURE 8260** series possess excellent dimensional stability to protect such assemblies from strain and stress during service, moisture and thermal exposures. **SECURE 8260** series are best suited for bonding and encapsulating of miniature components, assemblies and housing prevalent used for portable consumer electronics such as music players, mobile phones, digital cameras, external hard drives, smart cards, miniature systems, etc. and engineering products such as compact sensors and encoders, miniature vibration motors, piezoelectric sensors, actuators, etc.

Key Characteristics & Features

SECURE 8260 series

CURING SYSTEM: Ultraviolet light & heat curing

KEY SUBSTRATE: Plastics

SECONDARY SUBSTRATE: Glass & metals

VARIABLE CURING

- Increase options for assembly designs & production frequency
- Faster assembly or alignment with instant ultraviolet curing
- Adhesives in shaded area can be heat cure to improve bonding strength

EXCELLENT DIMENSIONAL STABILITY

- Possess low shrinkage, high modulus, high glass transition temperature & low coefficient of thermal expansion
- Protect intricate & delicate assembly from stresses due to CTE mismatch & thermal cycling
- Permit assembly of dissimilar materials

HIGH SERVICE TEMPERATURE

- Enhance resistance & reliability of assembly against high temperatures & temperature cycling
- Permit against higher reflow temperature profile of lead free solder

LOW MOISTURE ABSORPTION

- Enhance resistance & reliability of assembly against humidity
- Permit service under demanding environmental conditions

Typical Applications

- Bonding, sealing & lapping of plastics such as polycarbonate, polyamide, PET, ABS, acrylic, polyethylene, PVC, to plastic & other substrates such as glass, metals & ceramics
- Bonding of miniature components & devices onto housings, chassis & frames
- Mounting for mechanical assemblies
- Rapid fixturing & lapping of components after alignment or partial assembly

Ordering Information

Product Line: SECURE

Grade: SE-8261, SE-8262, SE-8263

Variant: Additional features such as visible light cure, low temperature heat cure & low viscosity are available on request

Download: Technical & Material Safety Data sheets are available on request

Package Size: Available in 10ml syringe, 30ml syringe, 50ml bottle & 1 litre bottle. Other packaging & size available on request

MSDS: Information on restricted hazardous substances are available on request

Selection & Classification

Liquid, 1,400 - 1,600 cP

SECURE 10-034



Bonding resin flow



Filling adhesive



Filling resin

Viscous liquid, 1,200 - 18,000 cP Thix

SECURE 10-034



Bonding resin flow



Bonding



Repairment

Semi-paste, 16,700 - 14,700 cP Thix

SECURE 10-034



Bonding, unshar



Bonding



Repairment

Typical Material Properties

SECURE 6000 series

Flow	Spine
Appearance	Amber
Curing	2,000 mJ / cm ² of UV-A or 120°C for 30 minutes
Refractive Index	1.51
Hardness, Shore D	88
Elongation @ Break, %	2
Shrinkage, %	+1.0
Tensile Strength, MPa (PSI)	25.9 - 37.4 (3,750 - 4,800)
Modulus, MPa (PSI)	1,724 - 1,876 (250,000 - 275,000)
Shear Strength (70%/70%), MPa (PSI)	10.3 (1,500)
Glass transition temperature (T _g), °C	140
Coefficient of thermal expansion (CTE), ppm/°C	
a) CTE before T _g	42
b) CTE after T _g	60
Service Temperature, °C	-60 to 200