

# SECURE 8140 series

**Ultraviolet-curable** introduces **SECURE**, a comprehensive line of advanced ultraviolet and visible light cure adhesives utilizing the latest resins and additives. Provides an essential engineering material with versatile processing and wide variety of performance for modern product assembly. **SECURE 8140** series are formulated for structural bonding of such polymeric substrates. **SECURE 8140** series cured with outstanding bonding strength on plastics when bonded by ultraviolet light. **SECURE 8140** series provides tougher flexibility with excellent peel and impact resistance. **SECURE 8140** series are ideal suited for bonding, sealing and locking of plastics related components such as housings, chassis, sub-assemblies, printed-circuit boards, flexible printed circuits, etc. used for product durability and mounting. **SECURE 8140** series are also suited for high strength locking and enforcement of components and connectors.

## Key Characteristics & Features

### SECURE 8140 series

**CURING SYSTEM:** Ultraviolet light curing

**SECONDARY CURING (PPEM):** Visible light curing

**KEY SUBSTRATE:** Plastics

**SECONDARY SUBSTRATE:** Glass, metals & ceramics

#### OUTSTANDING (STRUCTURAL) STRENGTH

- Permit compact & simply mechanical assembly
- Permit assembly of different materials
- Permit large & heavy assembly
- Ensure structural integrity during further assembly or during service

#### RAPID CURING

- Instant fixturing in seconds with functional strength
- Faster assembly or alignment with rapid ultraviolet curing

#### EXCELLENT TOUGHEN FLEXIBILITY

- Provides low modulus, low hardness & high flexibility
- Provides high strength locking & mounting of components
- Permit stress & strain relief for flexible components & assembly extensions
- Strengthen delicate connectors, plugs & switches during use

#### EXCELLENT IMPACT RESISTANCE

- Provides high peel & cleavage strength
- Provide shock and impact damping
- Protect against dynamic loading & stress from shock, slip, impact & vibration

## Typical Applications

- Bonding, sealing and locking of plastics such as polycarbonate, polyimide, PET, ABS, acrylic, polystyrene, PVC, to plastics & other substrates such as glass, metals & ceramics
- Bonding & mounting of plastics molded parts & components such as housings, chassis, sub-assemblies & holders
- Bonding & sealing plastic tanks & containers
- Rapid fixturing & locking of component after alignment or partial assembly
- Fixturing of wires & components on printed circuit boards
- Enforcing of flexible printed circuits & product extensions
- Conformal coating of printed circuit boards & flexible printed circuits
- Strengthening of connectors, plugs & switches

## Ordering Information

**Product Line:** SECURE

**Datasheet:** Technical & Material Safety Datasheets are available on request

**Grade:** 81-8140, 81-8141, 81-8142, 81-8143

**Package Size:** Available in 30ml syringe, 300ml syringe, 200g Cartridge & 1 liter bottle. Other packaging & size available on request

**Variant:** Additional features such as heat-cure & low viscosity are available on request.

**NOTE:** Information on applied hazardous substances are available on request

## Selection & Classification

### Self leveling liquid, 400 - 800 cP

### SECURE 81-81-01



### Liquid, 1.750 - 2.100 cP

### SECURE 81-81-02



### Viscous liquid, 12.700 - 14.700 cP Ultra

### SECURE 81-81-03



### Semi-paste, 21.800 - 22.800 cP Ultra

### SECURE 81-81-04



## Typical Material Properties

### SECURE 81-81-01 series

Base	Urethane
Appearance	Amber
Coating	3.000 ml / can of UVA
Refractive Index	1,48
Hardness, Shore D	55
Bongalton B break, N	80
Shrinkage, %	<0,0
Tensile strength, MPa (PSI)	17,2 - 29,7 (3.000 - 5.000)
Modulus, MPa (PSI)	294,8 - 329,4 (50.000 - 52.000)
Shear strength (PC/PC), MPa (PSI)	20,8 (3.700)
Service temperature, °C	-50 to 150