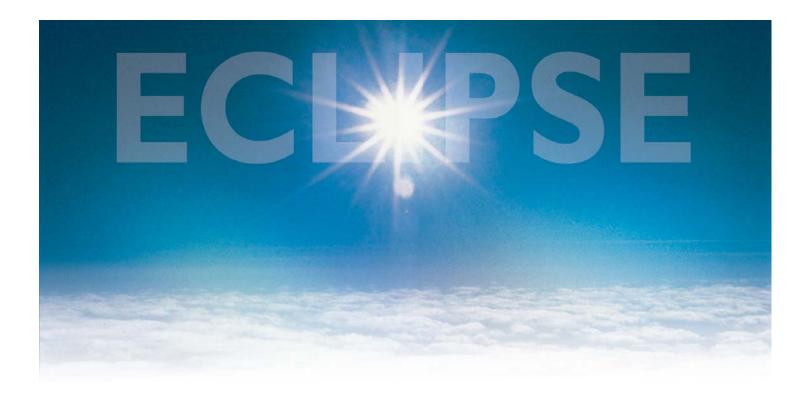


# **ECLIPSE® Light-Cure Systems: Adhesives and Sealants** Solving problems...with the speed of light



**ECLIPSE 300 Series of Adhesives ECLIPSE 700 Series of Acrylic Sealants** 

#### **ECLIPSE Light-Cure Adhesives & Sealants**

- Improve productivity
- Reduce work in process (WIP)
- Eliminate mixing and metering equipment
- Reduce waste and scrap
- Increase "just-in-time" manufacturing

ECLIPSE Light-Cure Adhesives and Sealants feature innovative UV technology for bonding, tacking and sealing. Environmentally friendly and convenient to use they are 100% solids, single component systems that fully polymerized in seconds, with exposure to UV A or visible light. They require no premixing, preheating or metering equipment to dispense. The unique ECLIPSE chemistry generates no VOC's during the curing process, contains no solvents and requires no moisture or additional heat to fully cure. Compared to conventional two component adhesive or sealing systems users benefit from improved productivity by increasing production through-put and eliminating work-inprocess. They are ideally suited for both short-run "just-in-time" manufacturing and automated high volume assembly. In both cases ECLIPSE Light-Cure Adhesives and Sealants require less manufacturing floor space then conventional systems and consume less energy during operation. They also reduce waste and scrap requiring no special handling and are used and stored at room temperature.

ECLIPSE Light-Cure Adhesives and Sealants were developed for use in a variety of industrial applications and show excellent adhesion to most substrates.

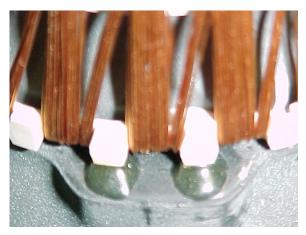
**The ECLIPSE 200 Series** are qualified for use in medical device manufacturing requiring Class VI performance.

**The ECLIPSE 300 Series** are designed for general tacking, sealing, and bonding applications.

**The ECLIPSE 700 Series** are based on a unique copolymer and are designed to act as both a tacking adhesive and sealant.

ECLIPSE Light-Cure Adhesives and Sealants are based on two chemistries: Acrylate or Epoxy. Both chemistries provide distinct adhesive and physical properties allowing users to choose the product that best fits their requirements.

Products formulated with acrylic monomers provide excellent wetout and adhesion. They can be used for bonding of plastics, metal, ceramic and glass. ECLIPSE 200 and 300 Series products also have a visible, blue light cure capability that allows curing through UV-blocked, tinted or translucent materials. The ECLIPSE 700 Series incorporate urethane molecules into the polymer matrix offering additional toughness while maintaining semi-flexible elastomeric properties.



ECLIPSE 309 used to tack plastic to ceramic

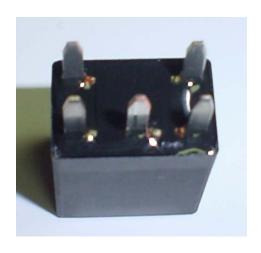
The ECLIPSE 320 Series are formulated with an innovative epoxy chemistry that cures in shadowed areas. They provide excellent adhesion to metal, glass and porous substrates with very low shrinkage. ECLIPSE 320 Series also cure to a tack free surface making them ideal for sealing, tacking and encapsulating. This series also offers better electrical properties, environmental resistence and a higher service temperature range than acrylic based products.



ECLIPSE 309 used for coil termination



ECLIPSE 321 bonds metal to glass with a complete cure in the areas shadowed by the wire mesh.



ECLIPSE 303 sealing switch connector



ECLIPSE 703 bridge bonding a ferrite core

ECLIPSE Light-Cure Adhesives & Sealants meet your needs, with a broad product mix and the ability to customize products to specific performance requirements.

### **ECLIPSE 200 Series of Medical Adhesives**

	Key Attributes	Applications				
203	Tough, highly flexible bond, low viscosity liquid. Class VI approved.	Catheter assembly	bonding,	tube	bonding,	facemask

### **ECLIPSE 300 Series of Adhesives**

Acrylic	Key Attributes	Applications	
302	High strength, flexible bond, self leveling	Bonding	
303	Environmental resistance, hard, rigid	Tacking, sealing, bonding	
304	Highest flexibility, resilient	Bonding, Sealing	
309	Excellent adhesion for dissimilar materials, high strength, flexible	Tacking, Bonding	
Epoxy			
321	High service temperature, semi-flexible	Tacking, sealing	
322	Highest service temperature, rigid, environmental resistance, paste	Tacking, sealing	
323	High service temperature, hard, durable, environmental resistance, self leveling	Tacking, encapsulation	

## **ECLIPSE 700 Series of Acrylic Sealants**

Urethane- Acrylate	Key Attributes	Applications
703	Excellent adhesion, semi-flexible, high impact resistance, gel	Tacking, coil termination, sealing of parts, commutator strengthening
704	High strength, environmental resistance, permanent adhesion, gel	Tacking, coil termination, sealing of parts, commutator strengthening
706	Flame retardant, tough yet flexible, passes aviation industry's FAR 25.853	Sealing and coating of parts

### **Additional Information**

Hardman<sup>®</sup> offers seven families of Light-Cure Polymer Systems and also formulates custom products to meet unique processing and performance requirements.

#### The ECLIPSE family of UV curable products

ECLIPSE 100 Series of Conformal Coatings ECLIPSE 200 Series of Medical Adhesives ECLIPSE 300 Series of Adhesives ECLIPSE 400 Series of Flexible Potting Compounds ECLIPSE 700 Series of Acrylic Sealants ECLIPSE 800 Series of Deep-Cure Sealants ECLIPSE 900 Series of Cure-In-Place Gaskets

To request information on the complete line of ECLIPSE Light Cure Systems or to request technical data:

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