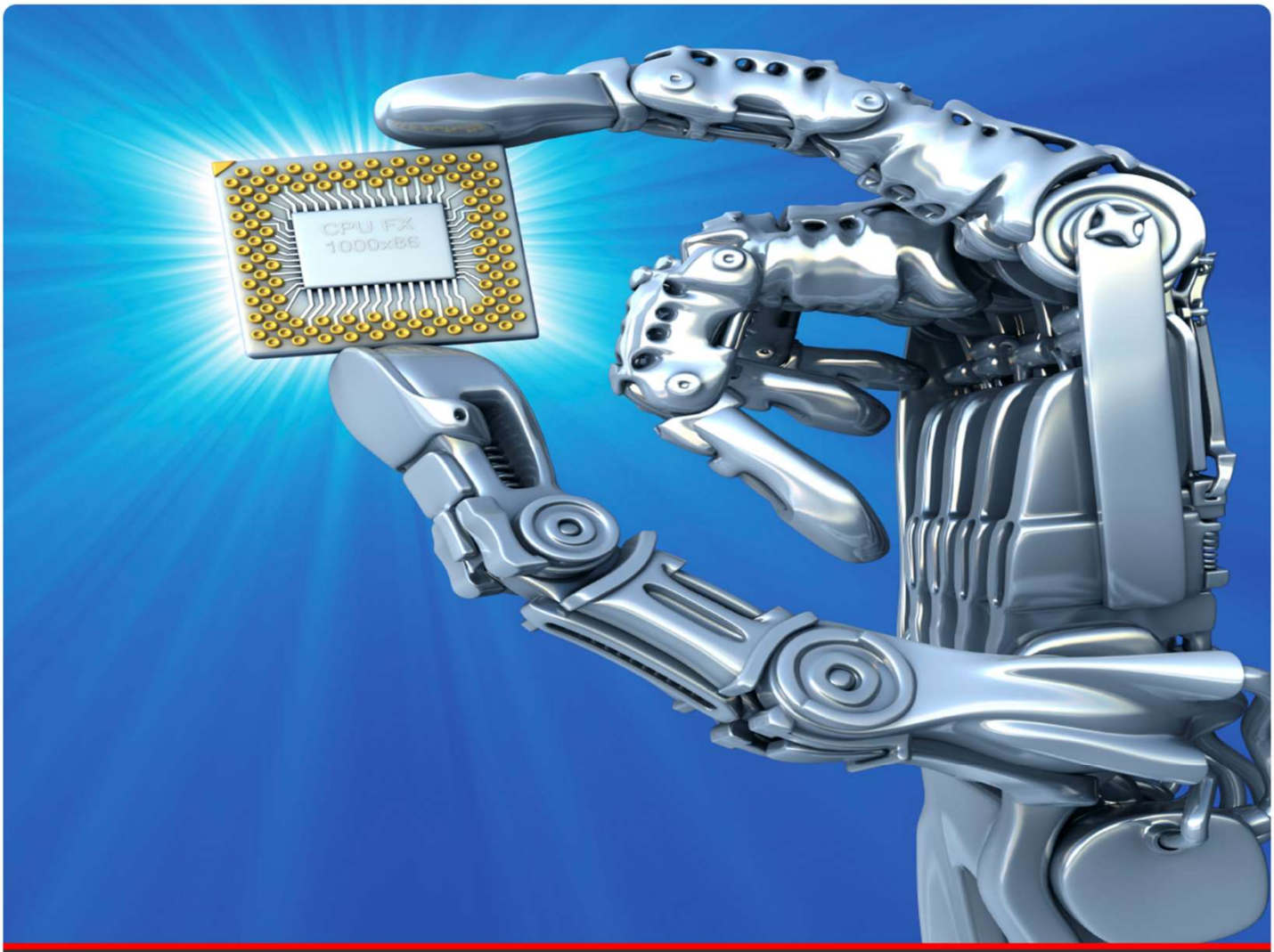


# Optimax® Epoxy Resins

## Driving Industry standards, Optimax® next generation epoxy resin systems are based on proven chemistries.

Optimax®
Next Generation Adhesives

High performance manufacturing adhesives

Optimax®
Next Generation Adhesives

# High-Performance Epoxy Resins for Bonding, Potting & Encapsulation, Thermally Conductive and UL Certified applications

We offer a complete line of two-component epoxy resin adhesives for structural bonding, potting and encapsulation applications. Below is a list of our front-line grades. Custom formulation and packaging options are available upon request.

## Optimax® High Strength Adhesives

| Optimax® | Packaging | Colour | Working Time min | Open Time min | Application |
|---|---|---|---|---|---|
| 150-CL | 50ml/400ml | Clear/Black | 4-6 | 10-15 | All-purpose high strength adhesive with a 5 minute working time. Excellent adhesion to a wide variety of substrates. |
| 300-CL | 50ml/400ml | Clear/Black | 25-30 | 50-60 | All-purpose high performance adhesive with 30 minute working time. Excellent adhesion to a wide variety of substrates. |
| 140-TE | 50ml/400ml | Off-White | 3-5 | 6-8 | Toughened structural epoxy adhesive. The cured epoxy forms a bond line which has excellent peel resistance and shear strength. Stable mechanical and electrical properties between -45℃ and 150℃. |
| 589-SE | 50ml/400ml | Clear/Black | 60-90 | 185-200 | Structural epoxy resin. High performance manufacturing epoxy resin for multiple manufacturing applications. |

## Optimax® Room Temperature or Heat Cure High Strength Adhesives

| Optimax® | Packaging | Colour | Room Temp. Cure | Heat Cure | Application |
|---|---|---|---|---|---|
| 6213 | 50ml/400ml | Grey | Working time: 20-30 mins | 80℃ - 2 hours or 40°C – 16 hours | Ideal for metal bonding, cabin or SMC FRP parts bonding, aluminium honeycomb plate splicing, ceramic membrane assembly sealing, lithium battery module internal structure bonding, composite bonding. |
| 6209 | 50ml/400ml | Black/Grey | Working time: 70-80 mins | 80℃ - 1 hour | Excellent adhesion to a wide variety of materials such as aluminium, metal, plastic, SMC glass fibre, motor products, high temperature sensors, glass, polyester, aluminium to steel plate, etc. Excellent high and low temperature resistance, -50℃-180℃ |

## Optimax® High Temperature – Bonding and Potting

| Optimax® | Temperature | Packaging | Room Temp. Cure | Heat Cure | Application |
|---|---|---|---|---|---|
| 8156 | Continuous -55°C to +300°C<br>Intermittent -55°C to +350°C | 50ml/400ml Bulk | Pot life at 25°C (500 grams), hrs >8 | 2 hrs @ 100°C +2 hrs @ 150°C | Optimax® 8156 is a two-component extremely high temperature epoxy. This long work life resin system is designed for the bonding, coating, sealing, potting and impregnation high temperature demanding applications. Optimax® 8156 has outstanding high temperature stability. It also provides excellent moisture, chemical and corrosion resistance as well as resistance to thermal and mechanical shock. |

## Optimax® UV Cured Epoxies

| Optimax® | Packaging | Viscosity Cps | Wavelength | Application |
|---|---|---|---|---|
| 8046-LV | 30ml<br>1 Litre | 500 | 365nm | Optimax® 8046-LV is a fast curing, low viscosity, UV curable epoxy adhesive designed for bonding a wide variety of substrates including engineering plastics, glass, acrylic and ceramics. Optimax® 8046-LV bonds in seconds under UV light and provides tough impact resistant adhesion to both flexible and rigid substrates. |
| 8047 | 30ml<br>1 Litre | 5000-7000 | 365nm | Optimax® 8047 is a filled, low shrinkage, light curing epoxy adhesive that offers low CTE and high bond strength. Optimax® 8047 cures to a high bond strength polymer with excellent adhesion to metals, ceramics, and glass. This epoxy was specifically designed as a glob top encapsulant for smart card applications and encapsulations of chip modules. Optimax® 8047 is free of solvents, has high ionic purity, and is resistant to moisture and humidity. |

Optimax® epoxies are widely used for the encapsulation or potting of electronic components and structural bonding applications. The epoxy specification will depend on the type of component being encapsulated, potted or bonded and the performance requirements for the finished component. The performance of the potted or encapsulated component in terms of, for example, thermal conductivity, shrinkage, dielectric strength will be directly related to the product formulation.

## Optimax® Cartridge Systems - Potting & Encapsulation

| Optimax® | Colour | Packaging | Working Time min | Open Time min | Application |
|---|---|---|---|---|---|
| 815-PE | Clear | 50ml<br>400ml | 3-5 | 12-13 | Short working time. High performance epoxy resin used for potting and encapsulating electronic components, switches, connectors, plugs, solar panel assemblies, ballasts, etc. |
| 830-PE | Clear | 50ml<br>400ml | 20-30 | 54-58 | Medium working time. Epoxy resin used for potting and encapsulating electronic components, switches, connectors, plugs, solar panel assemblies, ballasts, etc. |
| 894-PE | Black | 50ml<br>400ml | 60-70 | 175-200 | Long open time potting and encapsulation epoxy resin. Superior chemical and resistance characteristics. Suitable for a wide range of manufacturing applications. |

## Optimax® UL Certified - Potting & Encapsulation

| Optimax® | Colour | Packaging | Working Time min | Application |
|---|---|---|---|---|
| 6112 | Black | 1kg burst packs<br>20kg drums | 40 | Used for potting and encapsulating switches, connectors, plugs, electronic components, solar panel assemblies, motor ballasts, automotive electronics, power tools, etc. |
| 6225 | Black | 25Kg Part A<br>3.75kg Part B | 65 | Optimax® 6225 is a high-performance, high temperature epoxy resin used for potting and encapsulating electronic components. Optimax® 6225 has been formulated to exhibit superior chemical and environmental resistant properties. |

## Optimax® Thermally Conductive - Potting & Encapsulation

| Optimax® | Colour | Packaging | Working Time | Heat Cure | Application |
|---|---|---|---|---|---|
| 6115-2 | Black | 10kg Part A<br>0.5kg Part B | 60 mins | 100°C - 2 hours<br>80°C - 3 hours | Optimax® 6115-2 is a high-performance epoxy resin used for potting and encapsulating applications. Designed for applications where high thermal conductivity values are required in automotive potting and encapsulation. |
| 6113 | Black | 20Kg Part A<br>2.4Kg Part B | 45 mins | 80°C - 3 hrs<br>100°C – 2 hrs | Optimax® 6113 is a high-performance, high temperature, high thermal conductivity epoxy resin used for potting and encapsulating electronic components. |

## Optimax® High Temperature Epoxy - Potting & Encapsulation

| Optimax® | Colour | Packaging | Working Time | Heat Cure | Temperature range | Application |
|---|---|---|---|---|---|---|
| 6903 | Black | 5kg Part A<br>1kg Part B | 10 hrs | 120℃ - 1 hour +<br>150℃ for 1 hour | Service:<br>-55°C to +260°C<br>Intermittent:<br>-55°C to +300°C | Optimax® 6903 has been specifically developed for long-term high temperature resistance use in potting and encapsulation applications. |

## Optimax® Optically Clear – Bonding, Potting & Encapsulation

| Optimax® | Colour | Packaging | Working Time | Application |
|---|---|---|---|---|
| 6108 | Clear | 10kg Part A<br>5kg Part B | 60 mins | Optimax® 6108 is a high-performance optically clear epoxy resin used for potting and encapsulating applications. |
| 835-PE | Clear | 50ml<br>200ml | 3 hours at 65 °C | Optimax® 835-PE is an ultra-clear, 2-component epoxy material designed for electronic, optical, medical, and general potting applications and for the casting of small electrical components. Certified for NASA Outgassing. |

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High performance manufacturing adhesives

NovaChem

Innovative Adhesive Formulations

# *Innovative formulations based on proven chemistries.*


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