



## Optimax<sup>®</sup> Epoxy Resins

Driving Industry standards, Optimax<sup>®</sup> next generation epoxy resin systems are based on proven chemistries.

**Optimax<sup>®</sup>**  
Next Generation Adhesives

High performance manufacturing adhesives

## Optimax® Structural Bonding Epoxy Resins

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®	Packaging	Colour	Working Time min	Fixture Time min	Hardness Shore D	Application
150-CL	50ml 400ml	Clear	4-6	10-15	78-80	All purpose high strength adhesive with a 5 minute working time. Excellent adhesion to a wide variety of substrates.
300-CL	50ml 400ml	Clear	25-30	50-60	78-80	All purpose high performance adhesive with 30 minute working time. Excellent adhesion to a wide variety of substrates.
120-HP	50ml 400ml	Grey	20-30	120-180	78-80	High performance industrial, assembly and manufacturing epoxy adhesive.
140-RT	50ml 400ml	Off-White	60-70	160-180	85	Rubber toughened epoxy, high strength with high peel and shear properties.
141-MR	50ml	Metallic Grey	4-6	12-15	78-80	Quick metal repair and assembly adhesive with very high strength properties.
589-SE	50ml 400ml	Black	60-90	185-200 min	78-80	Structural epoxy resin. High performance manufacturing epoxy resin for multiple manufacturing applications.

## Optimax® UV Cured Epoxies

Optimax®	Packaging	Viscosity Cps	Cure - Nm	Application
8046-LV	30ml 1 Litre Bulk	500	365	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 1 Litre Bulk	5000-7000	365	Optimax® 8047 is a specialised UV cured epoxy resin designed for demanding manufacturing applications. 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 adhesive 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. This epoxy cures quickly under LED and UVA light.



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## Optimax® Epoxy Resins – Potting & Encapsulation

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®	Colour	Packaging	Working Time min	Open Time min	Hardness Shore D	Self Leveling	Application
815-PE	Clear	50ml 400ml	3-5	12-13	79	Yes	High performance epoxy resin used for potting and encapsulating electronic components. Formulated to exhibit superior chemical and environmental resistant properties. Used for potting and encapsulating switches, connectors, plugs, electronic components, solar panel assemblies, ballasts etc. Customised low viscosity formulation designed to flow around intricate and complex components. Short working time.
830-PE	Clear	50ml 400ml	20-30	54-58	78	Yes	Epoxy resin used for potting and encapsulating electronic components. Formulated to exhibit superior chemical and environmental resistant properties. Used for potting and encapsulating switches, connectors, plugs, electronic components, solar panel assemblies, ballasts etc. Customised low viscosity formulation designed to flow around intricate and complex components. Medium working time.
855-PE	Black	50ml 400ml	60-80	180-220	85	Yes	A potting and encapsulation compound with good electrical properties. Suitable for a wide range of potting, protection, coating and encapsulation applications.
894-PE	Black	50ml 400ml	60-70	175-200	79	Yes	Long open time potting and encapsulation epoxy resin. Superior chemical and resistance characteristics. Suitable for a wide range of manufacturing applications.

## Optimax® Optically Clear Potting and Encapsulation

Optimax®	Colour	Packaging	Working Time min	Hardness Shore D	Application
835-PE	Optically Clear	50ml 400ml Bulk	RT: 24 hours 3 hours at 65 °C	86	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. This epoxy system has a 2:1 mix ratio by volume. The cured adhesive gives high impact, high clarity and excellent bond strength to a wide range of substrates. It can be used for bonding glass, metals, woods and some plastics. Certified for NASA Outgassing.

## Optimax® Epoxy Resins – High Temperature

Optimax®	Colour	Packaging	Working Time min	Hardness Shore D	Self Leveling	Temperature Range	Application
8154	Amber	50ml 400ml Bulk	30 minutes @ 120°C 5-10 minutes @ 150°C	92	Yes	Continuous-60°C- 260°C Intermittent-60°C- 300°C	Optimax® 8154 is a low viscosity, high Tg, two-component epoxy that can be used for potting, encapsulating or bonding. Designed for use in the medical, optical and semiconductor industries. Optimax® 8154 has excellent high temperature resistance at 300°C and excellent solvent, chemical and moisture resistance including gamma rays, autoclave, and ETO. It is an excellent choice for semiconductor applications including capillary under fill or flip chip die attach.
8155	Clear	50ml 400ml Bulk	2 hr @ 100°C+2 hr @ 150°C 4 hr @ 125°C	92	Yes	Continuous-55°C- 300°C Intermittent-55°C- 350°C	Optimax® 155 is a two component, clear epoxy system. This long work life, resin system is designed for the bonding, coating, sealing, potting and impregnation of electrical and structural components. The cured system has excellent electrical and physical properties above 250°C with outstanding high temperature stability. It also provides excellent moisture, chemical, and corrosion resistance as well as resistance to thermal and mechanical shock.



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# NovaChem

*Innovative Adhesive Formulations*

*Innovative formulations based  
on proven chemistries.*



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