

OPTIMAX[®]

High Performance Manufacturing Adhesives & Sealants

Technical Data Sheet

Revision number 090914

Product	Optimax[®] 815-PE Fast Cure Epoxy Resin Potting Compound
Description	Optimax [®] 815-PE is a high performance epoxy resin used for potting and encapsulating electronic components. Optimax 815-PE has been formulated to exhibit superior chemical and environmental resistant properties.
Applications	Used for potting and encapsulating switches, connectors, plugs, electronic components, solar panel assemblies, ballast's etc. Customised low viscosity formulation designed to flow around intricate and complex components.
Advantages	Fast cures speeds of 3-5 minutes can be achieved. Excellent adhesion to a wide variety of materials such as aluminum, copper, steel, brass, concrete, FRP/SMC, wood, glass, plastics, ceramics, painted metals, graphite, polyurethane, galvanized metals, rigid plastics, etc. Self-levelling.

Physical properties – uncured adhesive

Mixed Viscosity @ 25 °C	15,000 – 20,000 cps
Mixing Ratio	1:1
Mixed Colour	Clear
Working Life	3-5 minutes
Specific Gravity	1.1
Full Cure Time	2-3 hours

Physical properties – cured adhesive

Shore Hardness D	78 - 80
Shear Strength	14 – 18 MPa
Peel Strength	3 – 5 MPa

Chemical Resistance Data

The chemical resistance of Optimax[®] 815-PE was evaluated by bonding the Aluminium/Aluminium as per specification, cured for 7 days @ 25° C then kept immersed in the media listed here and tested for lap shear strength.

Effect of immersion in different media.

(Immersion for 7 days in various media)

MEDIA	LAP SHEAR MPa
Petrol	18
Acetic acid (10%)	15
Xylene	15
Lubricating oil-HD30	17
Paraffin	15

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Water @ 23 °C	17
Water @ 90 °C	17

Preparation	To achieve maximum performance from Optimax® 815-PE, it is essential that all substrates are clean, dry and free from surface contaminations such as oil or grease.
Data ranges	The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.
Storage	Store between 8°C to 21°C out of sunlight and in tightly sealed containers. Refer to packaging specific quote for shelf life information.
Safety	Consult the Material Safety Data Sheet.
Notes	The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Novachem Ltd. and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the product and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.