

# OPTIMAX®

*Excellence in Engineering and Manufacturing Adhesives*

TECHNICAL DATA SHEET

Revision number: 50211

Optimax 150CL

## Optimax 150CL Fast Cure Epoxy

### Description

A versatile easy to use solvent free epoxy adhesive, which can be used to bond or repair most materials such as wood, metal, glass, ceramic, plastics and rubbers. The product hardens in 5 minutes with high bond strength and chemical resistance.

### Advantages

Easy to use two component adhesive system.  
Excellent adhesion to 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.  
High bond strength develops in 2-3 hours.

### Physical properties – uncured adhesive

Mixed Viscosity @ 25 °C	15,000 – 20,000 cps
Mixing Ratio	1:1
Mixed Colour	Clear
Working Life	5 minutes
Operating temperature range	-40 to +130°C
Maximum intermittent operating Temperature	+150°C
Specific Gravity	1.1
Cure time	2-3 hours

### Physical properties – cured adhesive

Shore Hardness D	78 – 80
Shear Strength	14 – 18 MPa
Peel Strength	3 – 5 MPa
Thermal Conductivity (W/mK)	0.1 W/mK
Coefficient of thermal expansion	60 – 120 x 10 E <sup>-6</sup>
Dielectric Strength (kv/mm)	50 – 90 kv/mm
Volume resistivity (OHM/cm)	3 – 5 x 10 E <sup>12</sup> ohm/cm

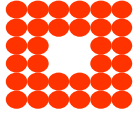
### Chemical Resistance Data

The chemical resistance of Optimax 150CL 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



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Xylene	15
Lubricating oil-HD30	17
Paraffin	15

<b>MEDIA</b>	<b>LAP SHEAR MPa</b>
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Water @ 23 °C	17
Water @ 90 °C	17

**Preparation**

To achieve maximum performance from Optimax 150, 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.