



# PLANKTON

**Biobased** Epoxy Resin  
made from **Renewable Resources**

## PLANKTON



Plankton are microscopic organisms that float freely with oceanic currents and in other bodies of water. Plankton is made up of tiny plants (called phytoplankton) and tiny animals (called zooplankton). Plankton is an essential part of the marine food chain. But according to new research, their numbers are dwindling. Plankton are the base of the marine food web, without them all larger organisms will probably die. No plankton=no fish= no food for millions of people.



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# PLANKTON

Bio-Epoxy Resin made from Renewable Resources

Our product uses a naturally occurring and renewable resource and has low odour.

Various fillers, additives and dyes have been tested with the Bio-Epoxy resin and applied as a thin coating on timber and concrete. These tests show great application opportunities for the bio-epoxy resin in the existing market and new market opportunities that will take advantage of its hardness, adhesive strength, resistance to UV and transparency. The clear version of the Bio-Epoxy can be as transparent as glass.

## Applications



### Building industry

as a sealant or floor cover, feature finishes either in the coloured or clear form, building materials and adhesives.



### Manufacturing industry

in fiberglass products such as marine craft, rainwater tanks; in plastics for car light or traffic light lenses; electrical circuit boards.



### DIY

a broad range of products from adhesives to water repelling sealants, feature finishes, and numerous hobbies.

### More applications

Molding, sealant coating, adhesive (glue or fiberglass resin).

## TECHNICAL DATA SHEET

### Mechanical & Processing data

Mix Ratio (by volume)	100:40
Mix Ratio (by weight)	100:30
Working life	1 hour
Gel time	Tacky for up to 12 hours
Phenol free	Yes
Compressive strength - unfilled	87 + 3 MPa
Compressive strength - sand filled 1:1 by vol	108+ 4 MPa
Glass Transition temperature - unfilled T <sub>g</sub> - °C	65-75 °C
Pencil Hardness ASTM D3353	8H to 9H
UVA ASTM G154 (UV / Humidity @24H)	No deterioration
Mandrel Bend Test ISO 1519 (thin film)	No cracking > 10mm
<b>Flooring Fire test - AS / ISO 9239.1 (2003)</b>	
Critical Heat Flux (CHF) - non directional	7.1 + 1.9 kW/m <sup>2</sup>
UVA ASTM G154 (UV / Humidity @24H)	8 + 3 %
Melting, Blistering & Penetration of flame through to substrate	Yes

### Key features

#### 77% Renewable properties

Primary ingredients from renewable sources.

#### UV resistant

48hrs UV lamp exposure.

#### BPA free

#### Low viscosity

#### Yellowing resistance



The reaction generates heat so should not be left unattended while curing and used within 1 hour



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& driven by values



### REDUCE

Lower your carbon footprint.



### REPAIR

Repair solutions, tips, services and kits.



### RECYCLE

End-of-life solutions for the composite industry.



### REUSE

Upcycling materials for new performing composites.



### RESPECT

Respect for all stakeholders in the composites industry, the environment, humans & the planet as a whole.

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