

## Opti-tec 5001

Optically clear  
epoxy adhesive



### Our customer

LucyNation Lighting

### Customer benefits

- High temperature resistance withstands intense lamp lights
- High surface energy allows wetting and wicking in between glass cracks
- Good shear strength protects wheels during handling



## Projectionist oil wheels get extended lifespan using optically clear, Opti-tec 5001 epoxy

LucyNation Lighting is an event lighting company which specialises in atmospheric projection using oil wheels to create psychedelic patterns. The oil wheels consist of three glass segments glued together to create two compartments with a hub in the centre, and are then filled with coloured oils. They are attached to a projector with high intensity light to project well-defined shapes and patterns onto a surface. Over the course of their lifetime, these oil wheels are exposed to very high temperatures from the lamps, as well as occasional mishandling, both of which can result in surface fractures and cracks.

With a library of over 100 oil wheels, some of which can be expensive to obtain, it makes both environmental and economic sense for LucyNation to repair the cracks in their wheels rather than replace them.

Jason Legge, owner of LucyNation Lighting, said:

*"I experimented with different glass adhesives to find something that had good clarity so that the image is not distorted, or refraction projected out of the join. I have found that Opti-tec 5001 Optical Epoxy Adhesive is effective for this purpose, and allows me to continue using the oil wheels past their normal lifespan."*

**Opti-tec 5001** has high optical clarity, a similar refractive index to the oil wheels, and cures to a hard finish. Its low viscosity allows it to wick into the cracks, helping to seal them against the coloured oils.

## Opti-tec 5001

- High optical clarity with excellent resistance to yellowing
- Clear, water white with a low viscosity of 100 cps.
- Room or low temperature curable
- Low fluorescence
- High surface energy and low viscosity allows it to readily wet and wick between surfaces. It develops strong adhesion to most materials used in optics, including metals, ceramics, glass and most plastics
- Good impact and thermal shock resistance, with low internal stresses due to low shrinkage on cure
- Cures to a hard, glass-like material which can be polished
- Good chemical and moisture resistance

**Applications include:** Optical assembly, optical filters, glass bonding, plastic fibre optics, opto-electronics, photonics. Potting or encapsulation where high optical clarity is required: thin rock sections, geology samples, relics and artifacts, tissue samples, petrology.



**Contact us for more information on our adhesives**

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