

Opti-tec 5001 Optical Epoxy Adhesive



Description

Also available to buy online at [mouser.com](https://www.mouser.com)
SHOP 

Opti-tec 5001 is a two component, very low viscosity optical epoxy with very high optical clarity. It has a long pot life and can be cured at room temperature or at 65°C for 1 hour. Opti-tec 5001 is designed for potting, encapsulation and adhesion of components where high optical clarity, good wetting and low viscosity are important.

Features & Benefits

- High optical clarity with excellent resistance to yellowing
- Clear, water white with a low viscosity of 100 cps.
- Room or low temperature cure
- 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

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- Opti-tec 5001 is also available in a translucent white version

Applications

- 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

Specifications

Typical properties		
Mix ratio	100:25 resin to hardener	
Mixed viscosity	0.1 Pa.s (100 cps) @ 25°C	
Colour	Water white	

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Typical properties		
Specific gravity	1.1	
Pot life	1 hour @ 23°C (< 25g mix) 2 hours @ 23°C (< 4g mix) Max suggested mix 100g	
Cure schedule	Bondline temperature 25°C 65°C	Time 16-24 hours 60 mins
<i>Note: Optimal cured properties are achieved by curing at a bondline temperature of 65°C.</i>		
Cured properties (60 minutes @ 65°C)		
Glass transition temperature (T _g)	50°C	
Hardness, Shore D	81	
Temperature range	-60 to 200°C	
CTE	50-60 ppm/°C	
Lap shear strength (Al/Al)	3000 N	

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Typical properties		
Optical transmission	>97% @ 300-900 nm	
Refractive index	1.54 est.	

Safety Data Sheets
For the latest SDS for this product, please e-mail msds@intertronics.co.uk

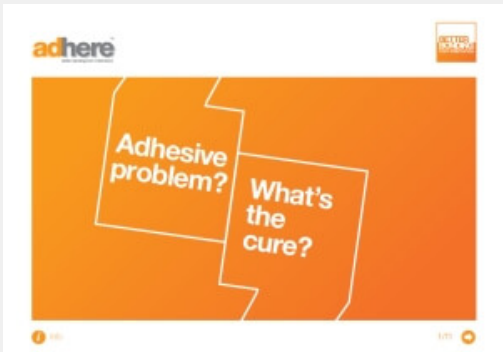
Other Information

Opti-tec 5001 Optical Epoxy Adhesive



[Structural Adhesives Selector Guide](#)

Start your adhesive selection process by reading our Structural Adhesives Selector Guide, detailing different chemistries and material specifications.



[Adhesive Problem? What's the Cure?](#)

A guide to adhesive bonding, considering structural bonding and the criteria involved for successful assembly.

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Our [Technical Bulletins](#) page has links to:

- [Epoxyes for Thin Rock Section Manufacture](#)

Ordering Information

Opti-tec 5001 is available in twinpacks or in bulk kits.







The twinpack is a clear film sachet, with the resin and hardener separated by a removable clip and rail divider. [Click here for twinpack mixing instructions.](#)

Standard twinpack size is 4g total weight. Opti-tec 5001 twinpack sachets are packaged in quantities of 5, sealed into a protective aluminium foil pouch. After opening pouch, use adhesive twinpacks within a few days, or tightly reseal the pouch with the enclosed desiccant to preserve shelf-life.

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Standard 500g bulk kit comprises two bottles, one each of Part A and Part B.

Typical properties	Description	
<div>OPT5001-4G</div> <div><div>SHOP </div></div>	5 x 4g twinpack sachets	
<div>OPT5001-500G</div> <div><div>SHOP </div></div>	500g kit	
OPT5001-W-500G	500g kit	translucent white version

Storage: Store in the original unopened containers under cool dry conditions between 15° and 25°C.



Let's start by talking about your application



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orders@intertronics.co.uk

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Name*

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Company*

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Phone*

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Opti-tec 5001 Optical Epoxy Adhesive



Email*

■ Post code*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.

■ Tell us about your application

Any information that you submit using this form will be processed according to our [privacy policy](#).

■ Name

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Supplied by:



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