

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



Description

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

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive is a two component, medium viscosity epoxy with high optical clarity. It has a fast room temperature cure, which can be accelerated by heating. Opti-tec 5006-1 is designed for potting, encapsulation and adhesion of components where high optical clarity, good wetting and medium viscosity are important.

Opti-tec 5006-1 can be used for bonding glass, quartz, metal and many plastics. It has been certified as non-cytotoxic, and may be considered for use in the manufacture of medical devices.

Features & Benefits

- Optically clear, with excellent resistance to yellowing
- Medium viscosity of 5,000-10,000 cps
- Fast cure at room or low temperature, and reaches handling strength in 30 minutes; full cure can be achieved in 10 minutes at 65°C
- Non-cytotoxic when cured
- Meets ISO 10993-5 Elution Test
- High surface energy allows Opti-tec 5006-1 to wet and wick between surfaces
- Develops strong adhesion to most materials used in optics, including metals, ceramics, glass and

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



most plastics

- Good impact and thermal shock resistance
- Opti-tec 5006-1 is a hard material after cure and can be polished

Applications



- Optical assembly
- Medical device assembly
- Endoscopes
- Plastic & glass fibre optics

Specifications

Part number change: as of version 4.0, April 2021, the part number of this product changed from Opti-

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



tec 5006 to Opti-tec 5006-1. This is due to an unavoidable change in a formulation component. This change does not affect the product data-sheet specifications. The new formulation has passed internal testing and is deemed to be equivalent.

Specification		
Mix ratio	1:1 resin to hardener	
Mixed viscosity	5-10 Pa.s (5,000-10,000 cps)	
Colour	Clear, water white	
Specific gravity	1.20	
Pot life	5 minutes @ 23°C (2 gram mix) Recommended maximum application 2 grams Larger quantities may lead to exothermic reactions which may have undesired effects	

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



Specification		
Cure schedule	Bondline temperature	Time
	23°C	2 hours
	65°C	10 mins
Cured properties (24 hours @ 23°C)		
Hardness, Shore D	70	
Temperature range	-60 to 125°C	
CTE	55 ppm/°C	
Lap shear strength (Al/Al)	8 MPa	
Refractive index	1.54	
Shrinkage on cure	3%	
Shelf life	12 months from date of manufacture in original sealed containers	

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



Safety Data Sheets

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

Ordering Information


OPT 5006-1 is available in a convenient side-by-side double syringe cartridge.



Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive





Remove the seal and attach a static mixing nozzle to the cartridge. Place the cartridge in an [IDM Syringe Gun](#). Squeeze the Syringe Gun trigger until some mixed epoxy comes out of the nozzle. The Syringe Gun gives good control of the adhesive flow.

Part number	Description
<div>OPT5006-1-50G</div> <div></div>	Optically Clear Fast Cure Epoxy Adhesive, Double Syringe Cartridge, 50 gram
IDM805001	Syringe Dispensing Gun for 50g cartridges
IDM2N10	Static Mixing Nozzle (pkg 10) – for 50g cartridges

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



Part number	Description
<div>OPT5006-1-50KIT</div> <div><div>SHOP </div></div>	Contains 50 gram cartridge of epoxy, a Syringe Gun and three static mixing nozzles

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

Medical devices: It is the user’s responsibility to determine and validate the suitability of this adhesive in the intended medical device. This adhesive has not been tested for prolonged or permanent implantation, and is only intended for use in short term (28 days) or single-use disposable device applications. Intertronics does not authorise its use in long-term implant applications.

Let’s start by talking about your application

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



01865

842842



orders@intertronics.co.uk

- Name*
- Company*
- Phone*
- 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

Opti-tec 5006-1 Optically Clear ISO 10993 Epoxy Adhesive



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

■ Email

This field is for validation purposes and should be left unchanged.

Submit

Supplied by:



INTERTRONICS
12a Station Field Industrial Estate, Banbury Road, Kidlington
Oxfordshire England OX5 1JD
t 01865 842842 e info@intertronics.co.uk

Last updated: January 2024 Version: 4.4
Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warranties expressed or implied. The user shall determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith.