

Opti-tec 5054-T High Temperature Epoxy Adhesive



Description

Also available to buy online at  **SHOP** 

Opti-tec™ 5054-T is a two component, thixotropic, heat curing epoxy. It is formulated for very high temperature resistance and can operate up to 350°C for short periods. Its structure gives the material outstanding environmental resistance including super heated steam at 135°C. Opti-tec 5054-T high temperature epoxy adhesive finds applications in fibre optics where superior thermal and environmental resistance is required. With a simple 1:1 mix ratio, it is supplied in a convenient side-by-side double syringe cartridge, complete with static mixing nozzles.

Opti-tec 5054-T is a high viscosity version of [Opti-tec 5054](#).

Features & Benefits

- Can withstand high temperature steam autoclaving and operate for short periods up to 350°C
- Very long pot life of 12 hours after mixing
- High surface energy allowing it to readily wet glass optical fibres. It develops strong adhesion to most materials used in fibre optics and optics, including metals, ceramics, glass and most plastics.
- Low shrinkage on cure, which reduces internal stresses within the bond
- Excellent impact and thermal shock resistance, with low internal stresses
- High glass transition temperature results in excellent high temperature performance and creep

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resistance

- Very high resistance to moisture, vapours and most chemicals.
- Low outgassing and low vapour pressure – ideal sealing material for electronic and optical applications
- May be gelled at 80°C prior to full cure

Applications

- High temperature, high performance bonding and sealing
- Endoscope manufacture and repair
- Electronics repair

Specifications

Typical properties	
Mix ratio	1:1 resin to hardener
Mixed viscosity	15,000 mPa.s (15,000 cps)
Colour	Amber

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Typical properties		
Pot life	12 hours @ 23°C (4g mixed)	
Cure schedule	Bondline temperature 80°C 135°C 150°C	Time 2 hours – pre-cure gel (optional) 30 mins 15 mins
	Note: Optimal cured properties are achieved by curing for 15 minutes at a bondline temperature of 150°C. Whilst lower cure temperatures are quoted, they are not recommended for best performance.	
Cured properties (15 minutes @ 150°C)		
Glass transition temperature (Tg)	>140°C	
Density	1.25	
Hardness, Shore D	92	
Temperature range	-60 to 250°C	

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Typical properties	
Modulus	2 GPa
Shrinkage on cure	<3.5%
CTE	55 ppm/°C
Shelf life	12 months in original sealed containers

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

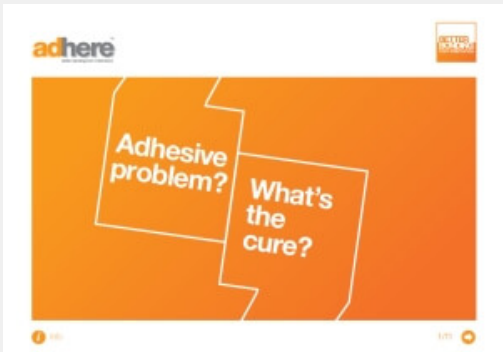
Other Information

Opti-tec 5054-T High Temperature 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:



- [Instructions: 50ml Side-by-Side Double Syringe Cartridges](#)

Ordering Information

Packaging


Opti-tec 5054-T is available in a convenient side-by-side double syringe cartridge.

The OPT5054-T-50KIT contains a 50 gram cartridge of high temperature epoxy, a Syringe Gun and three static mixing nozzles. It is ideal for product evaluations or small quantity users.

Part number	Description
<div>OPT5054-T-50G</div> <div><div>SHOP </div></div>	<div>50 gram double syringe cartridge</div>

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Part number	Description
IDM805050	Syringe Gun
IDM2N10	Static mixing nozzle (pkg 10)
OPT5054-T-50KIT 	Contains 50 gram cartridge of high temperature 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.

Let’s start by talking about your application

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orders@intertronics.co.uk

- Name*
- Company*
- Phone*
- Email*
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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

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