

High performance, chemical and heat resistant adhesive

Service temperature range -75°C to +150°C



Raychem S1125 high performance adhesive has been developed to match the superior chemical and heat resistance properties of DR-25 heat-shrinkable tubing and -25 heat-shrinkable moulded parts. Supplied in a unique 'bipack' to eliminate mixing ratio errors and air

entrapment during mixing. S1125 will crosslink effectively at room temperature. Pot life after mixing is approximately 1.5 hours.

Although developed for the Raychem System 25 cable harnessing products range, S1125 is an excellent adhesive for many other substrates including Raychem tubings (RNF-100, RT876, CRN, Convolex), Raychem moulded parts (in materials -3, -4 and -12), Raychem adaptors (in material -19) and aluminium alloy standard connector end fittings.



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Typical properties			Performance	Test method
	Mechanical	Lap shear strength		
		Aluminium to aluminium	7KN	RK6619 Clause 2.1
		DR-25 to DR-25 -25 to -25	400N 380N	
		Peel Strength Aluminium to DR-25	100N	RK6619 Clause 2.2
	Thermal	Lap shear strength		
		Aluminium to aluminium		RK6619 Clause 2.1
		at - 40°C	6.5KN	
		at +100°C	2000N	
		at +150°C	1500N	
	Chemical	Fluid resistance	Excellent	Lap shear strength after immersion in
		1S01817	Excellent	
		Lubricating Oil O-149	Excellent	
		Hydraulic Fluid H-5 15	Excellent	fluid for 24 hours at
		Diesel Fuel F-54	Excellent	+70°C
		Water	Excellent	
Specifications		Raychem RK6619		

## Installation

Mixing

For ease of handling and mixing, S1125 is supplied with both epoxy resin and hardener pre-weighed. To mix both components, remove the plastic separation clip from the centre of the bi-pack and then squeeze the bi-pack thoroughly. When mixed, the adhesive should have a uniform black colour. The separation clip may be used to ensure that the last traces of epoxy and hardener are squeezed from the corners of the pack.

For best results adhesive mixed in dual-packs, or ejected from duo-syringes without a mixing nozzle, should be squeezed into a separate disposable dish and mixed with a spatula before application to substrates.

Pot life

Once mixed S1125 has a pot life of approximately 1.5 hours.

Surface preparation The moulded part and cable jacket should be thoroughly degreased using a suitable solvent e.g. Isopropanol following the handling instructions supplied by the solvent supplier. After degreasing, the surfaces should be carefully abraded using a 100 grit abrasive cloth. Dust and other debris from abrasion should be wiped away with a dry tissue. Connectors or adaptors should only be degreased and not abraded.

Adhesive application Carefully cut open one corner of the bi-pack after mixing and apply a thin, uniform layer of adhesive to the substrate. Apply heat to the heat-shrinkable moulded part/tubing (Refer to the Code of Practice No. 604 for full installation instructions) and when fully shrunk, wipe away any excess \$1125 using Isopropanol or similar solvent. The adhesive joint may be handled once it has cooled to room temperature but should not be severely flexed until the adhesive has adequately cross linked.

Cross linking will occur under the following conditions, after heat shrinking:

■ After 12 hours at 25°C or ■ After 1 hour at 85°C or

After 0.25 hours at 150°C

Shelf life Handling In excess of 12 months when stored in the original unopened packaging at or below 23°C.

Irritant and dangerous for the environment while in its uncured state. Part A contains aliphatic polymer diamine. Part B contains reaction product: bisphenol A-(epichlorhydrin); epoxy resin (number average molecular weight <=700). Irritating to eyes and skin. Risk of serious damage to eyes. May cause sensitisation by skin contact. Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Avoid contact with skin. After contact with skin, wash immediately with plenty of water and soap. Wear suitable gloves and eye/face protection. Avoid release to the environment. Refer to safety data sheets. These are available via www.raychem.com/corporate/partners.asp

Further information is provided with each S1125 adhesive kit.

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