

Adhesive S1125 (-75°C to +150°C)

TE Connectivity's S1125 high performance adhesive has been developed to match the superior chemical and heat resistance properties of DR-25 heat-shrinkable tubing and moulded parts. Supplied in a unique bi-pack to eliminate mixing ratio errors and air entrapment during mixing. S1125 will crosslink effectively at room temperature. Pot life after mixing is +/- 1.5 hours. Although developed for the TE System 25 cable harnessing products range, S1125 is an excellent adhesive for many other substrates including the TE-tubings, TE-moulded parts (in material -3, -4 and -12) and TE adaptors (in material -19) and aluminium alloy standard connector end fittings.



Raychem S1125



High performance, chemical and heat resistant adhesive

| 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 | |
| Chemical | at +150°C | 1500N | |
| | Fluid resistance | Excellent | Lap shear strength after immersion in fluid for 24 hours at +70°C |
| | ISO1817 | Excellent | |
| | Lubricating Oil O-149 | Excellent | |
| | Hydraulic Fluid H-515 | Excellent | |
| | Diesel Fuel F-54 | Excellent | |
| Specifications | Water | Excellent | |
| | Raychem RK6619 | | |

Installation

| | |
|-----------------------------|--|
| Mixing | <p>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.</p> <p>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.</p> |
| 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 | <p>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 S1125 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.</p> <p>Cross linking will occur under the following conditions, after heat shrinking:</p> <p>■ After 12 hours at 25°C or ■ After 1 hour at 85°C or ■ After 0.25 hours at 150°C</p> |
| Shelf life | In excess of 12 months when stored in the original unopened packaging at or below 23°C. |
| Handling | <p>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.</p> <p>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</p> <p>Further information is provided with each S1125 adhesive kit.</p> |

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