Technical Data Sheet

RS 473-398 Cyanoacrylate Adhesive SMT Wire Tack Kit

RS 473-398 is a medium viscosity (100cP) modified Ethyl Cyanoacrylate based adhesive formulated to resist higher temperatures and thermal cycling appropriate for SMT assembly work. The kit comprises 20g Adhesive and 20ml Activator, which can also be purchased separately under RS 473-439. Activators greatly accelerate increase cure speeds though final bond strength may be reduced by up to as much as 30%. The adhesive is also suitable for bonding a wide range of materials including most plastics, rubbers and metals. It is also recommended for use on close fitting parts and smooth, even surfaces.

Preparation:

Surfaces must be clean, dry and free from oil and grease. Isopropyl Alcohol (IPA) provides an effective quick drying degreasant, particularly in clean environments and is available from RS in various forms, from wipes to aerosols. Please search under IPA on the RS website. For difficult to bond materials such as polyethylene, polypropylene and polytetrafluoroethylene (PTFE) and thermoplastic rubbers, RS 473-394 Polyolefin Primer is recommended, though not where a high peel strength is required.

Application:

Superglues are best suited to close fitting joints with max gap 0.15mm for medium viscosities and should be thinly applied to ensure rapid polymerisation and a good strong bond. Over application and high bond gaps reduces both curing speed and potential bond strength. Curing is initiated by atmospheric moisture and continues after full functional strength has developed, requiring at least 24 hours for full chemical/solvent resistance to develop. Cure speeds increase with increased relative humidity and ambient temperatures. Ensure joints are properly aligned. Apply a very thin line direct from the bottle to one surface only (and the activator to the other when used, allowing to dry before jointing). Press firmly together and hold till handling strength is achieved. Allow 24 hours to fully cure.

Health & Safety:

Avoid contact to the skin. Should contact be made and bonding occur soak in warm water until separation occurs, which may take several hours. Please refer to Material Safety Data Sheet (MSDS). Most up to date versions are retained on the RS website: www.rs-components.com.

Shelf Life:

12 months from date of receipt from RS if kept unopened and refrigerated at 5°C. (See MSDS, section 7)

Typical Properties of the Adhesive:

(See MSDS for properties of the activator)

Chemical Type:	Ethyl
Appearance:	Clear
Specific Gravity:	1.06
Viscosity:	80-120 cP, 100 typical (ISO 3104/3105)
Tensile Strength:	21 N/mm² (ISO 6922)
Fixture time:	10-60 seconds at 21°C
Full cure:	24 hours at 21°C
Flash Point:	>85°C
Gap Fill:	0.15mm max
Operating Temperature:	-50°C to +105°C continuous, +125°C intermittent

Typical Fixture times (seconds):

Steel/Steel:	<60 seconds
ABS/ABS:	<20 seconds
Rubber/Rubber:	<10 seconds