



Technical Data Sheet

RS 473-451 General Purpose Superglue – 2g Pipette

RS 473-451 is a low viscosity (40cP) Ethyl Cyanoacrylate adhesive formulated for general purpose bonding of most plastics, rubbers, metals and other common materials. It is recommended for use on assemblies with 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 pipette to one surface only. 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:

Chemical Type:	Ethyl
Appearance:	Clear
Specific Gravity:	1.06
Viscosity:	35-60 cP, 40 typical (ISO 3104/3105)
Tensile strength at 3 minutes:	>3.5 N/mm ² (ISO 6922)
Tensile Strength at full cure:	20 N/mm ² (ISO 6922)
Fixture time:	5-60 seconds at 21°C
Full cure:	24 hours at 21°C
Flash Point:	>85°C
Gap Fill:	0.10mm max
Operating Temperature:	-50°C to +80°C

Typical Cure Speeds:

Steel/Steel:	<30 seconds
Acrylic/Acrylic:	<10 seconds
Rubber/Rubber:	<15 seconds

RS Components

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Users must determine suitability, application methods and
take adequate precautions to meet their requirements.
RS terms and conditions of sale apply.

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