



REVISION HISTORY

<u>REV</u>	<u>DATE</u>	<u>ORIGIN</u>	<u>REASON FOR CHANGE(S)</u>
A	Scott Forlow	21Dec2017	New
B	Daniel Crouse	5/04/18	Added PCN language
C	Scott Forlow	15Feb2022	Added specific performance parameters
D	Scott Forlow	26May2023	Updated specific performance parameters

Q-CODE Q5T QUALITY REQUIREMENTS

For Mil Spec Components

The following are the quality requirements for product purchased under Q-code Q5T. This product is controlled by SAE standards, **AS9100**. This includes but is not limited to granting the right of access to the supplier's facilities and all applicable records to Plexus, their customer and regulatory authorities with the acceptance of this Purchase Order, flow down all applicable requirements to sub-tier suppliers including key characteristics and retention of all records that support the manufacturing or material used per the requirements of **AS9100**. Unless a written waiver is received from Plexus, the supplier agrees to abide by **AS9100** and the quality requirements listed below.

Please note for an approved Distributor, **AS9120** can be used as a replacement for **AS9100** as listed above.

All Shipments - Before a product can be released for production the supplier will be required to meet the documentation and quality requirements as follows:

- A. Original Equipment Manufacturer (OEM)/Original Component Manufacturer (OCM) Certificate of Conformance (COC) must also include the following:
 - 1. Name of Manufacturer
 - 2. OEM's/OCM's part number
 - 3. Lot # and Date Code or Serial numbers for each shipment
 - 4. A statement of Compliance specifying, **where appropriate**, compliance to the following:
 - o The drawings and specifications
 - o Applicable laws and regulations
 - o The requirements of the specific PO
 - 5. Signed and dated by an authorised representative
 - 6. If the product has a shelf life, manufacturer or cure date, batch number the shelf life and the expiration date must be included (note : the remaining shelf life must be greater than 50% of the stated shelf life) any special handling and/or storage requirements must also be included.
 - 7. The required information below is only applicable if the part is purchased direct from OEM/OCM.
 - o Plexus part number
 - o Revision or EC level if applicable
 - o Quantity
 - o Purchase order number

The minimum-required date code format shall identify the 2-digit workweek, 2-digit year (WWYY). If the component marking contains a lot and date code, then those markings must be traceable to the COC.

- B. DISTRIBUTOR Certificate of Conformance requirements
If the part is purchased from a distributor then an additional Certificate of Conformance (COC) from the distributor must be provided including the following:
 - 1. Name of the Distributor
 - 2. **Chain of custody where components have not been purchased direct from OEM/OCM**
 - 3. **All of the above requirements (A)**

*Notice: This document is considered "UNCONTROLLED" when it exists in any printed form.
See the Partner - Supplier section of the Plexus Web page for the current master of this Q-code.
<http://www.plexus.com>

- C. All cartons, required documentation, labels, packaging and packing slips must have the Plexus part number, EC level or revision (if applicable), date code(s), quantity, and P.O. number listed on them.
- D. Certificate of Analysis must be provided with each shipment covering the Parameter, Test Method and Results of all Date and Lot Codes. The tables below define the performance parameters for each material.

Parameter	Test Method	Result Limits
Material Type	N/A	Methyl Methacrylate (For Reference Only)
Appearance	Visual - Off White liquid	OK
Viscosity	Brookfield RVT, 25°C: Spindle 5	17,000 to 26,000 mPa.s (cP)
Tensile Lap Shear Strength	-	≥15.0 N/mm ²
Adhesion "T" Peel	-	≥4 N/mm
Fixture Time	23°C, Steel lapshears TS101	≤5 min
Stability	82°C, 3g Aluminium Tube	≥3 h

Loctite F241 Performance Parameters

Parameter	Test Method	Result Limits
Material Type	N/A	Ethyl Cyanoacrylate (For Reference Only)
Appearance	Visual - Black, thixotropic, viscous liquid	OK
Viscosity	Brookfield RVT, 25°C: Spindle 3, 20rpm	1700 to 5000 mPa.s (cP)
Tensile Lap Shear Strength	ISO 4587, Steel (grit blasted)	≥19.3 N/mm ²

Loctite 410 Performance Parameters

Parameter	Test Method	Result Limits
Material Type	N/A	Ethyl Cyanoacrylate (For Reference Only)
Appearance	Visual - Black, thixotropic, viscous liquid	OK
Viscosity	Brookfield RVT, 25°C: Spindle 4, 20rpm	4000 to 7000 mPa.s (cP)
"T" Peel Strength	ISO 11339, Steel (20 gauge grit blasted)	≥2 N/mm ⁽¹⁾
180° Peel Strength	ISO 8510-2, Steel (grit blasted)	≥3.1 N/mm ⁽²⁾

Note ⁽¹⁾: Applicable if manufactured in Ireland.

Note ⁽²⁾: Applicable if manufactured in Puerto Rico.

Loctite 4105 Performance Parameters

Parameter	Test Method	Result Limits
Material Type	N/A	Dimethacrylate Ester (For Reference Only)
Appearance	Visual - Purple liquid	OK
Fluorescence	Visual - Positive under UV light	OK
Viscosity	Brookfield RVT, 25°C: Spindle 3, 20rpm	900 to 1500 mPa.s (cP)
Shear Strength	ISO 10123 Steel Pins and Collars	2.5 to 25.0 N/mm ²

Loctite 222 Performance Parameters

The above listed documentation must be submitted with each shipment. Any shipment received without this documentation will be considered defective.

Product change notification

Upon acceptance of conforming product, documentation, and the requirements of this Q-code, the supplier's manufacturing process shall be considered "qualified". All changes require written approval from Plexus prior to implementation. Product or Process change notification requests (PCNs) shall be submitted to pcns@plexus.com.