



Q-CODE QH4 QUALITY REQUIREMENTS

The following are the quality requirements for product purchased under Q-code QH4. Please reference the Plexus Supplier Quality Manual [DCS 10503](#) for additional details and purchasing requirements. Unless a written waiver is received from Plexus, the supplier agrees to abide by the quality requirements listed below.

FIRST SHIPMENT

The documentation and quality requirement for the initial shipment and/or the first shipment after any changes have been made are as follows:

- A. **Material Certification** - A material certificate which defines the composition of the material shipped to Plexus per the Safety Data Sheet disclosure (SDS) shall be provided.
- B. **SDS -Safety Data Sheet** - In compliance with the Global Harmonized System (GHS), the SDS shall be provided in both the local and English language (see Table 1 for the local language).
 - The Supplier shall also periodically review and update the SDS as required in the “Updating Information” section or equivalent clause of the most updated version of the GHS document.

Table 1: Local languages by country as defined by location of receipt of product

| Country | Local language |
|---------------|--------------------|
| United States | English |
| Mexico | Spanish |
| Malaysia | Malay |
| China | Simplified Chinese |
| Bangkok | Thai |
| Scotland | English |
| Romania | Romanian |

- C. **Certificate of Compliance** - Must include a statement of overall compliance to all the applicable specifications (See Table 2). It also must include the following information for traceability:
 - Name of Supplier (if different than the actual Manufacturer/OEM/OCM)
 - Name of Manufacturer/OEM/OCM
 - Manufacturer's/OEM's/OCM's Part Number
 - Manufactures' EC level or Revision level
 - Manufacturer/OEM/OCM Lot #(s) or Date Code(s)
 - Expiration Date, or Shelf life and Date of Manufacture

Note: the remaining shelf life must be greater than 50% of the stated shelf life.

 - Special handling and/or storage requirements.
 - Product Properties and Analysis Results to the specification in Table 3 and test method used
 - Plexus part number ordered on the PO
 - PO number

Table 2: First Article Compliance Specifications

| Material Category | Required Specification |
|-------------------|----------------------------|
| Core Wire Solders | J-STD-006 J-STD-004 |



Upon the initial receipt and acceptable results, Plexus will release the supplier to a production status

D. Material Certification

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.

PRODUCTION SHIPMENTS

With a release for production, all subsequent lots of material shipped into Plexus shall provide the following:

A. Certificate of Compliance - Must include a statement of overall compliance to all the applicable specifications (See Table 2). It also must include the following information for traceability:

- Name of Supplier (if different than the actual Manufacturer/OEM/OCM)
- Name of Manufacturer/OEM/OCM
- Manufacturer's/OEM's/OCM's Part Number
- Manufactures' EC level or Revision level
- Manufacturer/OEM/OCM Lot #(s) or Date Code(s)
- Expiration Date, or Shelf life and Date of Manufacture

Note: the remaining shelf life must be greater than 50% of the stated shelf life.

- Special handling and/or storage requirements.
- Product Properties and Analysis Results to the specification in Table 3 and test method used
- Plexus part number ordered on the PO
- PO number

Table 3: CoC Minimum Measurement Requirements

| Material Category | Minimum Measurements |
|-------------------|---|
| Core Wire Solders | Acid Number per IPC-TM-650 2.3.13 Alloy Content: [%] Flux Percentage [%] Out of Box Silver Chromate Test |

Out of Box Silver Chromate Test

- a) Pull a sample from box, solder to copper plate using solder iron.
- b) Cut a 2-5 mm strip off of a piece of Silver Chromate test paper
- c) Place a drop of DI water onto the location of the flux residue.
- d) Using only clean tweezers to pick-up handle the test paper, place the cut strip of test paper into contact with the water deposit so that all or part of the DI water is absorbed on to the test paper.
- e) Record the result on the CoC of Silver Chromate paper for color change. The result will be use to compare with datasheet.



ALL SHIPMENTS

The documentation and quality requirements as listed below are required with each shipment.

- A. Shipping / Packaging: All cartons shall be labeled per Plexus Specification 11582: Supplemental Vendor Packaging Labeling Requirement. Each container shall be labeled with the manufactures part number and manufactures lot and/or date code and GHS warning label in both the local and English language (See Table 1 for the local language). For materials with expiration, each container shall be labeled with the expiration date. This information shall provide in a human readable format and in either 2D or 1D bar code format. The above listed documentation must be submitted with each shipment. Any shipment received without this documentation will be considered defective.

If any of the above criteria are not met the supplier must make appropriate tool and process corrections.

PRODUCT CHANGE NOTIFICATION

Product or Process change notification requests (PCNs) shall be submitted to pcns@plexus.com, please reference the details of our PCN policy and requirements in the Plexus Supplier Quality Manual [DCS 10503](#).

REVISION HISTORY

| REV | RELEASE DATE | ORIGINATOR | DESCRIPTION OF CHANGE(S) | REASON FOR CHANGE(S) |
|-----|--------------|--|--|---|
| D | 27 Oct 2020 | KL Lim | Update table to change spec refer to WI 13024 to IPC TM650 2.3.33. Updated format | Align Silver Chromate test per IPC requirements and format change |
| E | 14 Jul 2023 | Kristina Pintyak/ Scott Ubl/ Yuly Romero | Added in the first shipment section the requirement of the Safety Data sheet meeting the GHS requirements in local language, table 1 was added to list the languages for each country. In section All shipments, it was added the requirement of GHS labelling in local and English language. | Updated to meet Global Harmonized System-GHS-requirements. |