



## Q-CODE QH1 QUALITY REQUIREMENTS

The following are the quality requirements for product purchased under Q-code QH1 which will be submitted for assembly material acceptance. 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.
  - Plexus part number ordered on the PO
  - PO number

**Table 2:** First Article Compliance Specifications

Material Category	Required Specification
SMT Adhesives	IPC-SM-817
Underfill / Encapsulates Adhesives	J-STD-030
Staking / Bonding Adhesives	None
Thermally /Electrically Conductive Adhesives	IPC-CA-821
Thread lockers	None

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

**Plexus Confidential**

*This document is subject to a non-disclosure agreement in force between recipient and Plexus Corp. If you are not the intended recipient of this document, please destroy and notify the sender. The document is considered uncontrolled when existing in any printed form. Refer to the [www.plexus.com](http://www.plexus.com) for the most current version of all Supplier Quality Requirements by following the links Partners then Suppliers. Unauthorized usage is strictly prohibited.*



## 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
SMT Adhesives	Viscosity
Underfill / Encapsulates Adhesives	Viscosity
Staking / Bonding Adhesives	Viscosity
Thermally / Electrically Conductive Adhesives	Viscosity Filler loading [%] or Conductivity
Thread lockers	None

## 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. Each container shall be labeled with the manufacturer's part number, manufacturer's 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.

For materials provided in a kit, each container shall be also labeled with:

1. The kit part number
2. Kit lot and/or date code
3. If applicable, shall be labeled with the earliest container expiration date
4. GHS warning label in both the local and English language (See Table 1 for the local language).

This information shall be provided in a human readable format and in either 1D or 2D format.

The above listed documentation in all sections must be submitted with each shipment as applicable. 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

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](mailto:pcns@plexus.com).

REVISION HISTORY

REV	RELEASE DATE	ORIGINATOR	DESCRIPTION OF CHANGE(S)	REASON FOR CHANGE(S)
D	27 Oct 2020	KL Lim	Removed the requirement for Manufacturing Process Flow	n/a
E	05 Aug 2022	Kirk Van Dreel	Updated format and added requirements for kit labeling	Add requirement for labeling kits
F	15 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.