



TwistPin Connectors and RoHS Materials

European Union Directive 2011/65/EU, with amendment 2015/863, on the Restriction of the use of certain Hazardous Substances ("RoHS") states that certain types of equipment (primarily consumer electronic products such as personal computers) shall not contain lead, mercury, cadmium, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP, or DIBP. For the record, Glenair does not produce any OEM products of this type. Furthermore, our interconnect components are either free of the substances RoHS controls, or specifically intended for use in military-aerospace applications that are exempt. Makers of consumer products should refer to the following guidelines and contact the factory to verify all components meet RoHS compliance regulations.

Are Micro-D Connectors RoHS compliant?

The products in this catalog can be ordered with various plating finishes. Some of these finishes, for example cadmium and chem film, along with solder-dipping, do not comply with the RoHS directive.

Why doesn't Glenair eliminate non-RoHS products?

Glenair products are typically used in defense and aerospace equipment exempt from RoHS requirements. Glenair will continue to offer non-RoHS finishes and components in accordance with DoD and aerospace specifications. Our part numbers contain a broad range of finish and component options. Customers can easily specify RoHS compliant parts if desired.

Examples of products that do not comply with RoHS regulations:

1 Cadmium plating is available on metal shell connectors in this catalog. Note that cadmium plating does not currently comply with RoHS rules.

2 Chem film is available on metal shell connectors. This coating contains hexavalent chromium which does not currently comply with RoHS rules.

3 Tin-lead solder dipped printed circuit board tails. Board mount M83513 Micro-D's and other products are normally solder dipped in 63% tin 37% lead molten solder. RoHS compliance for consumer products requires elimination of solder coatings containing lead.

Examples of RoHS materials for easy selection

1 Specify electroless nickel plating on the connector shell. Or, choose stainless steel shells for maximum corrosion protection and RoHS compliance.

2 Use Mod Code 513 on Micro-D board mount connectors. Board mount Micro-D's and other products are normally solder dipped in 63% tin 37% lead molten solder. Any solder-dipped part can be supplied with RoHS compliant gold-plating instead simply by adding Mod Code 513 as a suffix to the standard part number.

Micro-D ROHS Material Examples

Part Number	Problem	Solution	RoHS Compliant Part Number
MWDM1L-37PSB	Plating code 1 specifies cadmium plating.	Change to electroless nickel plating (code 2).	MWDM2L-37PSB
MWDM2L-25SCBRP-.110	CBR style PCB connectors are solder-dipped in tin-lead.	Add Mod Code 513 to change the PCB tail finish to gold plating.	MWDM2L-25SCBRP-.110-513
MWDM6L-9S-6K7-18L	Plating code 6 specifies chem film.	Change to electroless nickel plating (code 2).	MWDM2L-9S-6K7-18L
M83513/03-E07C	Cadmium plated shell and solder-dipped contacts.	Change to nickel plating and gold contacts	M83513/03-E05N



RoHS Material Information

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Micro-D Connector Plating Codes: RoHS Compliance

Micro-D Plating Code	Plating Type	RoHS Compliance	Notes
1, C	Cadmium with yellow chromate conversion coating over electroless nickel	No	Electroless nickel is the preferred alternate.
2, N	Electroless nickel		First choice for RoHS compliant finish. Good corrosion resistance, excellent conductivity, M83513 approved, always in stock.
3, P	Stainless steel shell, passivated		Higher cost but unsurpassed corrosion resistance, not conductive enough for typical EMI needs. Build-to-order.
4	Black anodize over aluminum		Economical, non-reflective, non-conductive. Build-to-order.
5	Gold over aluminum		Low volume, higher cost, excellent conductivity. Build-to-order.
6	Chem film	No	Electroless nickel is the preferred alternate.
33, T	Nickel-PTFE		Glenair's 500 Hour Grey™ meets the need for a cadmium replacement with excellent conductivity, wear resistance and corrosion protection, M83513 approved.
29, A	AlumiPlate		RoHS compliant, 1000 hrs salt spray, conductive, operating temp -65 to +175 C, M83513 approved.
31, K	Zinc Nickel with olive drab conversion coating over nickel	no	similar to Glenair Plating code ZN. Per ASTM B841, not RoHS compliant, 1000 hrs salt spray, conductive, operating temp -65 to +175 C, M83513 approved.

Micro-D Backshell Plating Codes: RoHS Compliance

Plating Code	Plating Type	RoHS Compliance	Notes
J	Cadmium with yellow chromate conversion coating over electroless nickel	No	Electroless nickel is the preferred alternate.
M	Electroless nickel		First choice for RoHS compliant finish. Good corrosion resistance, excellent conductivity, M83513 approved, always in stock.
C	Black anodize		Inexpensive, non-reflective, not suitable for EMI (poor conductivity), build-to-order.
Z2	Gold		Low volume, higher cost, excellent conductivity, build-to-order.
E	Chem film	No	Electroless nickel is the preferred alternate.
MT	Nickel-PTFE		Glenair's 1000 Hour Grey™ meets the need for a cadmium replacement with excellent conductivity, wear resistance and corrosion protection, M83513 approved.
NF	Cadmium with olive drab chromate conversion coating over electroless nickel	No	Electroless nickel is the preferred alternate.