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## Material Declaration

### Part Description: Nickel Plated Ceramic Chip Capacitors. X7R Series.

Name of the part	Material Name	Chemical Element	CAS Number	Element Weight % of Total Weight	RoHS Compliant?
Dielectric	X7R Dielectric	Barium titanate(IV)	12047-27-7	59.78	Yes
		Lead titanium oxide (PbTiO3)	12060-00-3	1.22	YES. Exempt per RoHS Annex 7d. See below.
Internal Electrode	Metal Electrode	Silver	7440-22-4	21.7	Yes
		Palladium	7440-05-3	9.3	Yes
Termination	Metal Terminal	Silver	7440-22-4	6.4	Yes
Plating	Metal plating	Nickel	7440-02-0	1.12	Yes
		Tin	7440-31-5	0.48	Yes

## \*RoHS Annex

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### ANNEX

#### Applications of lead, mercury, cadmium and hexavalent chromium, which are exempted from the requirements of Article 4(1)

1. Mercury in compact fluorescent lamps not exceeding 5 mg per lamp.
2. Mercury in straight fluorescent lamps for general purposes not exceeding:
  - halophosphate 10 mg
  - triphosphate with normal lifetime 5 mg
  - triphosphate with long lifetime 8 mg.
3. Mercury in straight fluorescent lamps for special purposes.
4. Mercury in other lamps not specifically mentioned in this Annex.
5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.
6. Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminium containing up to 0.4 % lead by weight and as a copper alloy containing up to 4 % lead by weight.
7. — Lead in high melting temperature type solders (i.e. tin-lead solder alloys containing more than 85 % lead),
  - lead in solders for servers, storage and storage array systems (exemption granted until 2010),
  - lead in solders for network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunication,
  - lead in electronic ceramic parts (e.g. piezoelectronic devices).
8. Cadmium plating except for applications banned under Directive 91/338/EEC (1) amending Directive 76/769/EEC (2) relating to restrictions on the marketing and use of certain dangerous substances and preparations.
9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators.
10. Within the procedure referred to in Article 7(2), the Commission shall evaluate the applications for:
  - Deca BDE,
  - mercury in straight fluorescent lamps for special purposes,
  - lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications (with a view to setting a specific time limit for this exemption), and
  - light bulbs,
 as a matter of priority in order to establish as soon as possible whether these items are to be amended accordingly.