



# Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

Adobe Reader version 7.0.5 is required to complete this declaration.

1752-2 1.1	IPC Web Site for Information on IPC-1752 Standard <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>	Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat
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## Supplier Information

Company Name *	Company Unique ID	Unique ID Authority	Response Date *	Response Document ID				
AVX CORPORATION(KYOCERA)	05-889-5921	Dun & Bradstreet	2010-04-26					
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *	Duplicate Contact -> Authorized Representative				
Dennis Oldland	Corporate Manager-Environment	+1 843-946-0241	doldland@avxus.com					
Authorized Representative *	Title - Representative	Phone - Representative *	Email - Representative *	Supplier Comments or URL for Additional Information				
Toshihiko Koyanagi	Manager	(+81)266-27-2276 loc564	t-koyanagi@kyocera-kinseki.com					
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
	KC2520	TCXO	2010-04-26		Nagano Okaya Plant	15.03779	mg	Each
Alternate Recommendation				Alternate Item Comments				

## Manufacturing Process Information

Terminal Plating / Grid Array Material	Terminal Base Alloy	J-STD-020 MSL Rating	Peak Process Body Temperature	Max Time at Peak Temperature	Number of Reflow Cycles
Nickel/Gold (Ni/Au) - electrolytic	Other	1	260 C	10 seconds	2

Comments

Save the fields in this form to a file

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Import Data

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Lock the fields on this form to prevent changes

Lock Supplier Fields

### RoHS Material Composition Declaration

Declaration Type \*

Custom

**RoHS Directive 2002/95/EC** **RoHS Definition:** Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

All part numbers covered by this form comply with the current revision, in effect as of the date this form was signed, of Seagate's Product Stewardship Requirements. All part numbers listed in or referred to by this form comply with the hazardous substance restrictions of the European Union Restriction on Hazardous Substances (RoHS) Directive.

Supplier certifies that it gathered the information it provides in this form concerning RoHS restrictive substances using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive.

Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information.

However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as a part of the agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. (2002/95/EC; see [http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_037/l\\_03720030213en0019002\\_3.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en0019002_3.pdf)).

**RoHS Declaration \*** 1 - Item(s) does not contain RoHS restricted substances per the definition above

**Supplier Acceptance \*** Accepted

**Exemptions:** If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.

### Declaration Signature

**Instructions:** Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature **Dennis Oldland**

Digitally signed by Dennis Oldland  
DN: cn=Dennis Oldland, o=AVX Corporation, ou=Corporate EHS,  
email=oldland@avxus.com, c=US  
Date: 2010.04.20 08:55:05 -0400

## Homogeneous Material Composition Declaration for Electronic Products

**SubItem Instructions:** The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

**Substance Instructions:** [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

**Line Functions:** +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

	Item/SubItem Name		Homogeneous Material	Weight	Unit of Measure		Level	Substance Category		Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
															-	+	
+I	-I	Alumina Case, no mark	+M -M Porcelain(LABREP)	8.055	mg	+C -C	Supplier	Alumina	+S -S	Aluminium oxide	1344-28-1		7.3755	mg			
						+C -C	Supplier	Silicon	+S -S	Silicon dioxide	14808-60-7		0.365	mg			
						+C -C	Supplier	Calcium	+S -S	Calcium oxide	1305-78-8		0.0629	mg			
						+C -C	Supplier	Magnesium	+S -S	Magnesium oxide	1309-48-4		0.0503	mg			
						+C -C	Supplier	Chromium	+S -S	Chromium(III) oxide	1308-38-9		0.0629	mg			
						+C -C	Supplier	Molybdenum	+S -S	Molybdenum	7439-98-7		0.1384	mg			
			+M -M Seal Ring(LABREP)	1.748	mg	+C -C	Supplier	Iron	+S -S	Iron	7439-89-6		0.944	mg			
						+C -C	B	Nickel (external applic	+S -S	Nickel	7440-02-0		0.4644	mg			
						+C -C	Supplier	Cobalt	+S -S	Cobalt	7440-48-4		0.3396	mg			
			+M -M Metallized(LABREP)	2.002	mg	+C -C	Supplier	Tungsten	+S -S	Tungsten	7440-33-7		1.939	mg			
						+C -C	B	Nickel (external applic	+S -S	Nickel	7440-02-0		0.063	mg			
			+M -M Plating(Ni)(LABREP)	0.177	mg	+C -C	B	Nickel (external applic	+S -S	Nickel	7440-02-0		0.177	mg			
			+M -M Plating(Au)(LABREP)	0.151	mg	+C -C	Supplier	Gold	+S -S	Gold	7440-57-5		0.151	mg			
			+M -M Brazing(LABREP)	0.4531	mg	+C -C	Supplier	Silver	+S -S	Silver	7440-22-4		0.3776	mg			
						+C -C	Supplier	Copper	+S -S	Copper	7440-50-8		0.0755	mg			
+I	-I	Electrode, no mark	+M -M Electrode(LABREP)	0.00215	mg	+C -C	Supplier	Gold	+S -S	Gold	7440-57-5		0.001814	mg			
						+C -C	Supplier	Chromium	+S -S	Chromium	7440-47-3		0.000345	mg			
+I	-I	Crystal, no marking	+M -M Crystal(LABREP)	0.2582	mg	+C -C	Supplier	Silicon	+S -S	Silicon dioxide	14808-60-7		0.2582	mg			
+I	-I	Conductive paste	+M -M Conductive paste	0.0156	mg	+C -C	Supplier	Silver	+S -S	Silver	7440-22-4		0.0116	mg			
						+C -C	Supplier	Silicon	+S -S	Silicon	7440-21-3		0.004	mg			
+I	-I	Cap, laser	+M -M Kovar(LABREP)	1.879	mg	+C -C	Supplier	Iron	+S -S	Iron	7439-89-6		0.999205	mg			
						+C -C	B	Nickel (external applic	+S -S	Nickel	7440-02-0		0.5449	mg			
						+C -C	Supplier	Cobalt	+S -S	Cobalt	7440-48-4		0.3194	mg			

+C	-C	Supplier	Manganese	+S	-S	Manganese	7439-96-5	0.009394	mg				
+C	-C	Supplier	Silicon	+S	-S	Silicon	7440-21-3	0.005627	mg				
+C	-C	Supplier	Carbon	+S	-S	Carbon	1333-86-4	0.000375	mg				

+M	-M	Plating(Ni)(LAB	0.1084	mg	+C	-C	B	Nickel (external applic	+S	-S	Nickel	7440-02-0	0.1084	mg			
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+I	-I	IC,no marking	+M	-M	IC(LABREPORT	0.1607	mg	+C	-C	Supplier	Silicon	+S	-S	Silicon	7440-21-3	0.159894	mg			
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+C	-C	Supplier	Alumina	+S	-S	Alumina	7429-90-5	0.000477	mg				
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+C	-C	Supplier	Thallium	+S	-S	Thallium	25583-20-4	0.000214	mg				
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+C	-C	Supplier	Molybdenum	+S	-S	Molybdenum	7439-98-7	0.000087	mg				
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+C	-C	Supplier	Thallium	+S	-S	Thallium	7440-32-6	0.000027	mg				
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+C	-C	Supplier	Copper	+S	-S	Copper	7440-50-8	0.000009	mg				
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+C	-C	B	Arsenic/Arsenic Comp	+S	-S	Arsenic	7440-38-2	0.000005	mg				
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+C	-C	Supplier	Chromium	+S	-S	Chromium	7440-47-3	0.000000	mg				
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+I	-I	Au Bump,no marking	+M	-M	Au Bump(LAB	0.02763	mg	+C	-C	Supplier	Gold	+S	-S	Gold	7440-57-5	0.02735	mg			
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+C	-C	Supplier	Palladium	+S	-S	Palladium	7440-05-3	0.00028	mg				
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