2021 data sets for solution providers to report as Class A, Class C and/or Class D XMLs

Solution providers can choose to provide XMLs which report the data sets 1 and 2 in Distribute mode and/or Request/Reply mode. The verified declaration modes (Distribute, Request/Reply, Distribute and Request/Reply) will be listed alongside the verified declaration classes on the IPC website. In addition, solution providers can choose to report against the optional data set 3 which enables solutions providers to demonstrate that their solution can report a multi-layer structure in a Class D XML by using sub-product.

Data set 1: Product does not contain any RoHS substances and does not contain any REACH Candidate List Substances

Mandatory response product identification information which must be reported in a Class A XML, Class C XML and/or Class D XML

	Product information
ProductID itemNumber	CAP2345-20
ProductID itemName	20 pf capacitor
Response date	2-April-21
Amount	0.4 (g)
unitType	Each

Optional request product identification information which may also be reported in a Class A XML, Class C XML and/or Class D XML

	Product information
ProductID requesterItemNumber	OEMCAP123
ProductID requesterItemName	20 pf capacitor
Request date	1-March-21
Amount	0.4 (g)
unitType	Each

Declaration statements to be reported in Class A XML (see Clause 6.1 of IPC 1752A with Amendments 1, 2 and 3)

As a minimum, the Class A XML must include the following statements:

• Product meets EU RoHS requirements without any exemptions (see Appendix B of IPC 1752A with Amendments 1, 2 and 3)

• REACH Candidate List Substances of Very High Concern are not contained in product above the limit per the definition within REACH Candidate List of 8 July 2021 (See Appendix D of IPC 1752A with Amendments 1, 2 and 3). Solution providers can choose to report against a later REACH Candidate List if they prefer.

Declaration statements to be reported in Class C XML (see Clause 6.3 of IPC 1752A with Amendments 1, 2 and 3)

As a minimum, the Class C XML must include the following RoHS statements (see Appendix B of IPC 1752A with Amendments 1, 2 and 3):

- Cadmium/cadmium compounds: overThreshold=False
- Polybrominated biphenyls (PBBs): overThreshold=False
- Polybrominated diphenyl ethers (PBDEs): overThreshold=False
- Chromium VI compounds: overThreshold=False
- Lead/lead compounds: overThreshold=False
- Mercury/mercury compounds: overThreshold=False

As a minimum, the Class C XML must also state that overThreshold=False for the REACH Candidate List published by ECHA on 8 July 2021 (See Appendix D of IPC 1752A with Amendments 1, 2 and 3)

Product composition information to be reported in Class D XML (see Clause 6.4 of IPC 1752A with Amendments 1, 2 and 3)

HomogenousMaterial			SubstanceCa	Substance		
Name	Amount (mg)	Name	Concentration (%)	Exemption	Name	Amount (mg)
Ceramic	344				Barium titanate	299.28
					Bismuth titanium oxide	44.72
Electrodes	16				Silver	12
					Palladium	4
Termination	8				Gold	8
Nickel plating	12				Nickel	12
Tin plating	20				Tin	20

<u>Data set 2: Product is compliant to RoHS based on exemptions and contains REACH Candidate List Substance Lead titanium trioxide in an amount of 0.26% by weight of the article</u>

Mandatory response product identification information which must be reported in a Class A XML, Class C XML and/or Class D XML

	Product information
ProductID itemNumber	ABC4523
ProductID itemName	Electronic component
Response date	2-April-21
amount	0.12 (g)
unitType	Each

Optional request product identification information which may also be reported in a Class A XML, Class C XML and/or Class D XML

	Product information
ProductID requesterItemNumber	OEM321XYZ
ProductID requesterItemName	Electronic component
Request date	1-March-21
amount	0.12 (g)
unitType	Each

Declaration statements to be reported in Class A XML (see Clause 6.1 of IPC 1752A with Amendments 1, 2 and 3)

As a minimum, the Class A XML must include the following statements:

- Product meets EU RoHS requirements by application of the selected exemption(s): 7(c)-I from IPC List EL2011/534/EU and 7(a) from IPC List EL2011/534/EU (see Appendix B of IPC 1752A with Amendments 1, 2 and 3)
- REACH Candidate List Substances of Very High Concern are contained in product above the limit per the definition within REACH Candidate List of 8 July 2021 (See Appendix D of IPC 1752A with Amendments 1, 2 and 3). Solution providers can choose to report against a later REACH Candidate List if they prefer.

Declaration statements to be reported in Class C XML (see Clause 6.3 of IPC 1752A with Amendments 1, 2 and 3)

As a minimum, the Class C XML must include the following RoHS statements (see Appendix B of IPC 1752A with Amendments 1, 2 and 3):

- Cadmium/cadmium compounds: overThreshold=False
- Polybrominated biphenyls (PBBs): overThreshold=False
- Polybrominated diphenyl ethers (PBDEs): overThreshold=False
- Chromium VI compounds: overThreshold=False
- Lead/lead compounds: overThreshold=True: Exemptions = 7(c)-I from IPC List EL2011/534/EU and 7(a) from IPC List EL2011/534/EU: Concentration = 97%
- Mercury/mercury compounds: overThreshold=False

As a minimum, the Class C XML must also state that overThreshold=False for the REACH Candidate List published by ECHA on 8 July 2021 except for Lead titanium trioxide where the Class C XML must state that overThreshold=True and Amount = 0.26% and Lead where the Class C XML must state that overThreshold=True and Amount = 0.97186%. (See Appendix D of IPC 1752A with Amendments 1, 2 and 3)

Product composition information to be reported in Class D XML (see Clause 6.4 of IPC 1752A Amendment 1, 2 and 3)

HomogenousMaterial			SubstanceCa	Substance		
Name	Amount (mg)	Name	Concentration (%)	Exemption	Name	Amount (mg)
Active part ceramic	7.8				Manganese Oxide, (Mn3O4)	5.070
		Lead/Lead Compounds	4	7(c)-I from IPC List EL2011/534/EU	Lead titanium trioxide	0.312
					Nickel(II) oxide	1.248
					Cobalt Oxide, (Co3O4)	1.17
Termination metal plating	0.576				Silver	0.576
Termination glass	0.024				Silicon oxide (SiO2)	0.021768
		Lead/Lead Compounds	9.3	7(c)-I from IPC List EL2011/534/EU	Lead	0.002232
Termination metal solder	1.2	Lead/Lead Compounds	97.0	7(a) from IPC List EL2011/534/EU	Lead	1.164
					Tin	0.012
					Silver	0.024
Termination metal leads	86.4				Copper	86.4
Encapsulation organic polymer	24				Epoxy Resin ERL-2795	24

Optional data set 3: Additional option for solution providers to report a multi-layer structure in a Class D XML by using sub-product

Product identification information which must be reported in Class D XML

0.576

Termination metal plating

	Product information
ProductID itemNumber	ABC4523
ProductID itemName	Electronic component
Response date	2-April-20
amount	0.12 (g)
unitType	Each
SubProduct1	ItemNumber = ENC4523-01, ItemName = Encapsulation Housing, Amount = 0.0318 g
SubProduct2	ItemNumber = TER4523-02, ItemName = Termination, Amount = 0.0882 g

Product composition information to be reported in Class D XML (see Clause 6.4 of IPC 1752A Amendment 1, 2 and 3)

HomogenousMaterial			SubstanceCa	Substance				
Name	Amount (mg)	Name	Concentration (%)	Exemption	Name	Amount (mg)		
SubProduct1: ItemNumber = ENC4523-0	1, ItemName =	Encapsulation Housing, Ar	nount = 0.0318 g					
Active part ceramic	7.8				Manganese Oxide, (Mn3O4)	5.070		
		Lead/Lead Compounds	4	7(c)-I from IPC List EL2011/534/EU	Lead titanium trioxide	0.312		
					Nickel(II) oxide	1.248		
					Cobalt Oxide, (Co3O4)	1.17		
Encapsulation organic polymer	24				Epoxy Resin ERL-2795	24		
SubProduct2: ItemNumber = TER4523-0	SubProduct2: ItemNumber = TER4523-02, ItemName = Termination, 0.0882 g							
Termination glass	0.024				Silicon oxide (SiO2)	0.021768		
		Lead/Lead Compounds	9.3	7(c)-I from IPC List EL2011/534/EU	Lead	0.002232		
Termination metal leads	86.4				Copper	86.4		

0.576

Silver

Termination metal solder	1.2	Lead/Lead Compounds	97.0	7(a) from IPC List EL2011/534/EU	Lead	1.164
					Tin	0.012
					Silver	0.024