# 2020 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-20
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-20
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 16 July 2019 (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 16 July 2019 (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			SubstanceCategor	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</u> amount of 0.26% by weight of the article

## 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-20
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-20
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 16 July 2019 (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 16 July 2019 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	Category 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

	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		SubstanceCategory			Substance	
Name	Amount (mg)	Name	Concentration (%)	Exemption	Name	Amount (mg)

#### SubProduct1: ItemNumber = ENC4523-01, ItemName = Encapsulation Housing, Amount = 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 = TER4523-02, 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
Termination metal plating	0.576				Silver	0.576

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