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## Reporting data on pesticide residues in food and feed according to Regulation (EC) No 396/2005 (2016 data collection)

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### Abstract

According to Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed, Member States have to monitor pesticide residue levels in food samples and submit the monitoring results to EFSA and the European Commission. The Standard Sample Description (SSD) is the data model used for reporting the data on analytical measurements of chemical substances occurring in food, feed and water to EFSA. In 2015, EFSA issued a thoroughly revised guidance defining the appropriate SSD codes to describe the samples and the analytical results for the reporting of the 2014 pesticide residues monitoring data. In May 2016, a new guidance was published for the coding of specific SSD data elements for the reporting of the 2015 pesticide monitoring data. In the current document, new coding provisions are delivered for specific data elements to code the data generated in 2016. These provisions take into account the experience of both the previous reporting seasons and the new legislation applicable in 2016. In addition, new explanatory examples on the appropriate coding for specific food samples are provided.

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## Summary

Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin requires that Member States carry out official controls on pesticide residues in food. The results of the analysis have to be submitted to the European Food Safety Authority (EFSA) and the European Commission. According to Article 32 of this regulation, EFSA is responsible for drawing up a Report on Pesticide Residues on the basis of the monitoring results provided by the reporting countries.

In 2009, the Standard Sample Description (SSD) for food and feed was developed which is a standardised data model for reporting of data on analytical measurements of chemical substances occurring in food, feed and water. The SSD contains the data elements describing characteristics of samples and analytical results, controlled terminologies and validation rules to ensure compatibility of data from different data providers.

For the 2014 data collection, the guidance document describing the SSD data elements and the data coding was thoroughly revised (EFSA, 2015); the provision of this guidance were complemented and/or amended as described in the EFSA Guidance for the 2015 data collection (EFSA, 2016).

The provisions of the 2014 and 2015 guidance documents are still applicable for the 2016 data collection with a few changes, as described in this document. The new provisions for the data coding concern the following data elements:

- Product codes (prodCode):
  - For the 2016 data collection, the textual description of the MATRIX code P1040000A has been changed from 'Honey' into 'Honey and other apicultural products'. In addition, in case apicultural products (excluding honey) are tested, EFSA recommends describing in the SSD data element 'prodText' the specific bee-related food product analysed.
- Product treatment codes (prodTreatCode):
  - On the basis of the 2015 pesticide monitoring data reported to EFSA, it appeared that the existing prodTreat code T134A 'Churning' is not sufficient to flag butter samples among other dairy products. Therefore, new 'prodTreat' codes for specific groups of dairy products have been allocated in the PROTREAT catalogue.
- Action taken codes (actTakenCode):
  - The Pesticide Monitoring Network identified the need to add new codes in the ACTION catalogue. These new codes will give the possibility to signal that the residue measured resulted from the use of a substance not approved at European level and/or not authorised in the Member States for example in the framework of Regulation (EC) 1107/2009 and that follow-up actions were taken.
- Type of result codes (resType):
  - EFSA wishes to explore the possibility to develop a new approach for the estimation of the consumer's dietary risk to pesticide residues, which may be based also on the use of the reported limit of detection (LOD) in specific situations; starting from the 2016 data collection, the resType code 'LOD' can also be selected, if available.

In addition to the above changes, in the present document, EFSA provides more detailed explanations for the reporting of the results concerning, e.g. the 'prodText', 'sampM', 'sampD', 'exprRes' and 'resEvaluation'.

With regard to the changes that are brought to the parameter codes ('paramCode', SSD data element R.06) and to codes in other SSD catalogues on annual basis, these are listed in a separate document in Excel format; the latter document addresses the SSD catalogue amendments necessary for one or more of the following reasons:

- New parameter codes are included in the PARAM catalogue to reflect the changes in the legal residue definitions laid down in the European Union (EU) legislation and applicable in 2016; some of the existing codes in the catalogue have been deprecated, as obsolete.
- New parameter codes are included in the PARAM catalogue for the single components of legal residue definitions that are made up of more than one component.

- New parameter codes are included in the PARAM catalogue because new pesticides are analysed in the national laboratories and appropriate codes were not available in the previous version of the catalogue.
- Typos in the textual description of the PARAM code have been identified and corrected.
- Amendments of the PARAM codes, which were previously set for the same substance in the framework of different food data collection domains (e.g. overlapping substances in the pesticide residue and veterinary medicines areas).

In Appendices A–C of this guidance document, EFSA provides an updated list of codes to describe the samples covered by the 2016 and 2017 European Co-ordinated control programmes (EUCP) ('prodCode', 'prodTreat', 'progLegalRef', 'progSampStrategy' and 'progType') and to report the samples tested in the context of the reinforced import controls under Regulation (EC) No 669/2009 applicable for the 2016 control activities. In Appendix D, the updated rules for data validation are listed, while Appendix E provides additional examples for the coding of specific results. These examples clarify issues raised by some data providers in the course of the 2015 data collection carried out in 2016. Finally, in Annex A, the template for the 2016 national Summary Report is provided.

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## 1. Introduction

### 1.1. Background

According to Regulation (EC) No 396/2005<sup>1</sup> on maximum residue levels (MRLs) of pesticides in or on food and feed of plant and animal origin, Member States have to carry out official controls on pesticide residues in food. The results of the analysis have to be submitted to the European Food Safety Authority (EFSA) and the European Commission. According to Article 32 of this Regulation, EFSA has to prepare for each calendar year a report on pesticide residues on the basis of the results provided by the reporting countries. The annual report shall provide the following information:

- an analysis of the results of the controls on pesticide residues provided by the European Union (EU) Member States and European Economic Area (EEA) countries;
- a statement of the possible reasons why the MRL were exceeded, together with any appropriate observations regarding risk management options;
- an analysis of chronic and acute risks to the health of consumers from pesticide residues;
- an assessment of consumer exposure to pesticide residues based on the information provided under first bullet point and any other relevant available information, including reports submitted under Directive 96/23/EC<sup>2</sup>;
- recommendations should be elaborated regarding pesticides to be covered in future programmes.

Since 2009, the Standard Sample Description (SSD) is the data model used for the reporting of chemical occurrence data to EFSA. The SSD contains in total 76 data elements describing characteristics of samples and analytical results, controlled terminologies and validation rules. Twenty-three data elements are mandatory for the pesticide residue data transmission; for four additional elements, the data reporting is mandatory only under certain conditions. For the mandatory data elements, it is essential that reporting countries use a consistent approach for coding. Thus, clear guidance needs to be provided to the national competent authorities responsible for the data submission; only if these coding conventions are respected, EFSA can perform the analysis of the data from different data sources as required in Article 32 of Regulation (EC) No 396/2005.

For the 2014 data collection, the guidance document describing the SSD data elements and the data coding was thoroughly revised (EFSA, 2015); this document was further revised for the 2015 pesticide monitoring data collection (EFSA, 2016) and the present document for the 2016 data collection.

On a yearly basis, the EFSA Network on Pesticide Monitoring provides feedback on the experience with the use of the SSD data model. Based on this, on the observations made by EFSA during the data analysis of the previous year and on the basis of the new legislation relevant for control of pesticide residues in food,<sup>3,4</sup> EFSA identified a number of issues where the guidance document prepared for the previous reporting of pesticide monitoring data (EFSA, 2015) should be amended.

Finally, as every year, EFSA – in collaboration with the Network's members – reviews the SSD catalogues in view on the next pesticide monitoring data collection. The catalogue updates described in this document reflect the new legal requirements, e.g. the changes in the legal residue definitions under Regulation (EC) No 396/2005; comments and suggestions for improvement provided by the Network were also assessed and/or addressed in this document.

EFSA frequently receives requests from stakeholders asking for access to pesticide monitoring data submitted in the framework of the pesticide data collection as per Regulation (EC) No 396/2005. Since EFSA is not the owner of the data, in the past EFSA has contacted the data owners seeking the permission to disclose the data to the requestor prior to full or partial data disclosure. Taking into

<sup>1</sup> Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC. OJ L 70, 16.3.2005, p. 1–16.

<sup>2</sup> Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC. OJ L 125/10, 23.5.1996, p. 1–23.

<sup>3</sup> Commission implementing Regulation (EU) No 2015/595 of 15 April 2015 concerning a coordinated multiannual control programme of the Union for 2016, 2017 and 2018 to ensure compliance with maximum residue levels of pesticides and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin, OJ L 97, 16.4.2015, p. 7–20.

<sup>4</sup> Regulation (EC) No 669/2009 of 24 July 2009 implementing Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin and amending Decision 2006/504/EC. OJ L 194, 25.7.2009, p. 11.

account the recent developments on this matter (in particular with regard to the decision of the European Court of Justice<sup>5</sup>), the situation may evolve in the near future. If there will be changes that will impact the current approach followed for the data disclosure, EFSA will keep informed the data providers and data owners' through the members of the EFSA Network on Pesticide Monitoring.

EFSA launched a Member State consultation on the draft version of this guidance document on 16/3/2017. Comments and feedbacks were submitted by eight Member States (BE, BG, CY, DE, DK, GB, IT and SK); these comments have been taken into account in the final version of the document, as appropriate. The document was agreed by written procedures on 3 March 2017 by the EFSA Network on Pesticide Monitoring.

## 1.2. Terms of Reference

EFSA shall update the guidance document prepared for the 2014 and 2015 data collections (EFSA, 2015, 2016) describing the use of the SSD for coding the results of official controls performed in the course of 2016 by Member States and in accordance with the provisions of Article 29 and 30 of Regulation (EC) No 396/2005.

The current update shall in particular provide instructions for reporting information in the SSD controlled terminology that changed compared the previous guidance documents. The new legislation having an impact on the provisions on control of pesticide residues in food shall also be taken into account in this revised version of the guidance. In addition, the document shall provide unambiguous directions for data elements where difficulties with inconsistent coding were identified in the past or where the information provided by the reporting countries did not allow EFSA to perform the analysis as required in Article 32 of Regulation (EC) No 396/2005; in these cases, specific examples on the correct food samples coding should be provided.

To facilitate the work for the reporting countries concerning the 2017 data collection, the guidance document shall also provide the valid SSD codes for the reporting of the samples and results taken in the frame of the 2017 EU Co-ordinated control programme (EUCP).

## 2. Reporting of the pesticide residue results for samples taken in 2016

All provisions described in the previous EFSA Guidance on the use of the SSD for the 2014 and 2015 data collection (EFSA, 2015, 2016) are applicable also for the 2016 data collection except for the changes that are explained in the next paragraphs of the present document.<sup>6</sup> It should be noted that the modifications proposed for the 2016 data collection mainly refer to the possibility to select new or already existing SSD codes. Those changes refer to the following data elements: food product ('prodCode', SSD data element S.13), product text ('prodText', SSD data element S.14), food product treatment ('prodTreat', SSD data element S.17), type of the result ('resType', SSD data element R.27) and action taken ('actTakenCode', SSD data element R.31).

### 2.1. Food product ('prodCode', SSD data element S.13)

The explanations and examples presented in the previous guidance documents (EFSA, 2015, 2016) are still applicable. In this section, EFSA provides an explanation on the revised coding of 'Honey' samples.

On 1 January 2015, Commission Regulation (EU) No 752/2014<sup>7</sup> replacing Annex I of Regulation (EC) No 396/2005 entered into force. With this regulation, the structure of the food classification was changed.<sup>8</sup> Considering these changes, the MATRIX catalogue has been updated by amending the textual description of the MATRIX code P1040000A from 'Honey' to 'Honey and other apicultural products', while the product code itself remains unchanged. In addition, considering that the current prodCode P1040000A does not allow to discriminate among the different apicultural products tested and that it is important to know what exact food item has been analysed for, then it is strongly

<sup>5</sup> Document available at: <http://curia.europa.eu/jcms/upload/docs/application/pdf/2016-11/cp160128en.pdf>

<sup>6</sup> For the 2017 data collection, a consolidated guidance document will be prepared to have one single reference guidance document.

<sup>7</sup> Commission Regulation (EU) No 752/2014 of 24 June 2014 replacing Annex I to Regulation (EC) No 396/2005 of the European Parliament and of the Council. OJ L 208, 15.7.2014, p. 1–71.

<sup>8</sup> Annex I has been split in two parts: Part A contains a list of codes for the main products, including scientific names and a description of the product to which the MRLs apply, while in part B additional products are reported under the main products of part A. Thus, if a food product cannot be found in the food classification of part A, then part B of Regulation (EU) No 752/2014 should be consulted to identify the appropriate food code.

recommended to provide the full description of the product analysed (e.g. 'Bee pollen whole granules') in the data element 'prodText' (SSD data element S.14) when the code P1040000A is selected. Please refer also to Section 2.2.

An example how to report the result of a specific apicultural product sample (excluding honey) is reported in Example 1. If no full description will be provided for the results coded with prodCode P1040000A, then EFSA will assume the sample tested concerned honey.

**Example 1 :** Which prodCode should be used to report results on royal jelly?

Data element	Element value (catalogue)	Code description	Note
<b>prodCode</b>	P1040000A (MATRIX)	Honey and other apicultural products	Please note that, starting with the 2016 pesticide monitoring data collection, the MATRIX code description 'Honey' has been changed into 'Honey and other apicultural products'. The MATRIX alphanumeric code P1040000A has remained unchanged
<b>prodText</b>	'Royal jelly food grade'		In case the MATRIX code P1040000A is selected, the nature of the product analysed (e.g. royal jelly, pollen and nectar) should be described in the data element 'prodText'. No further description is needed in case the sample analysed was honey
<b>prodTreat</b>	T999A (PRDTR)	Unprocessed	

Considering the above, a new data validation rule has been set up: a warning message will be returned in case the MATRIX code P1040000A is selected and no 'prodText' is reported (see also Example 1 and Appendix D); should the data provider receive this warning message and the message is disregarded, EFSA will assume the sample tested was honey as such.

## 2.2. Product text ('prodText', SSD data element S.14)

If the 'ProdCode' selected is equal to 'XXXXXXA' (i.e. food product 'Not in list'), then the 'prodText' must be provided.

This data element should be used to provide a more detailed description of the product analysed. EFSA recommends making use of this SSD free text data element 'prodText' in two specific situations:

- Apicultural food products: If the MATRIX code P1040000A is reported and the sample tested is not honey, then the **apicultural product** analysed should be described in the 'prodText' (see also Section 2.2).
- Samples taken in the framework of import controls under **Regulation (EC) No 669/2009<sup>4</sup>**: The updated list of codes to describe the samples covered by the import controls Regulation 669/2009 relevant for 2016 data collection ('prodCode', 'prodTreat', 'progLegalRef', 'progSampStrategy' and 'progType') are reported in Appendix C. A description of the product analysed in the context of Regulation 669/2009 is needed for the food items listed in **Table 1**. The reason for this is that the pesticide MRL food classification (see also Part B of Annex I of Regulation (EC) No 752/2014) considers some couples of food items – that are covered by the import control regulation – under the same food code (see the three couples of food items with the same MATRIX code in **Table 1**) and for which the same MRL applies; for these couples of food commodities, the 'prodText' shall be reported in order for EFSA to analyse separately the import control results generated, e.g. basil rather than mint. Please note that for the food samples listed in **Table 1**, but analysed in the frame of another legislative framework than 669/2009 any other 'prodText' description can be provided than the one reported in **Table 1**.



**Table 1:** List of single ProdCode (MATRIX catalogue) where the string in 'prodText' are needed to describe the product analysed under Regulation (EC) No 669/2009

MATRIX code	MATRIX code description	Fixed 'prodText' string to be reported	Comment
P0256030A	Celery leaves	Chinese celery leaves	See also Part B of Annex I of Reg. 752/2014 and Appendix C
P0256030A	Celery leaves	Coriander leaves	
P0256080A	Basil and edible flowers	Basil (holy, sweet)	
P0256080A	Basil and edible flowers	Mint	
P0231020A	Sweet peppers/bell peppers	Chilli peppers	
P0231020A	Sweet peppers/bell peppers	Sweet/bell peppers	

Considering the above, a new data validation rule has been set up: an error message will be returned in case the MATRIX the codes reported in **Table 1** were selected in combination with the codes for the countries of origin and product treatments covered by the Regulation (EC) No 669/2009 (country of origin of the product ('origCountry', S.06), the product treatment ('prodTreat', S.17), and the programme type ('progType', S.34)) (see Appendix D for the full list of concerned combinations) and no 'prodText' was reported (see also Appendix D). As 'prodText', the only strings that will be accepted are the ones reported in **Table 1** in the column named 'Fixed 'prodText' string to be reported'.

Please find below an example on the use of the 'prodText' (Example 2).

**Example 2 :** Which 'prodCode' and 'prodText' have to be used to report results of coriander leaves from Viet Nam taken in the frame of the increased EU control on imported food (Regulation (EC) No 669/2009)?

Data element	Element value (catalogue)	Code description	Note
prodCode	P0256030A (MATRIX)	Celery leaves	Please note that, according to Annex I of Regulation (EC) No 396/2005 coriander leaves are part of the food sub-group of 'celery leaves'
origCountry	VN	Vietnam	
prodText	'Coriander leaves'		Although in general this is not a mandatory data element, for the food items described above in <b>Table 1</b> and the combination of information reported in Appendix C the 'prodText' description has to be mandatorily reported. The string to be used for reporting these samples can only be the ones indicated in <b>Table 1</b>
progType	K019A (SRCTYP)	EU increased border control programme on imported food	
prodTreat	T999A (PRDTR)	Unprocessed	
exprRes	B001A (EXRES)	Whole weight	
			Except for some products of animal origin and for certain food for infants and young children, the results are always expressed on whole product basis (code B001A)

Finally, it is recalled that the SSD **sample** descriptors must be consistent for all records reported for with the same 'Laboratory sample code' (labSampCode), (identical text for all records related to a certain labSampCode). For example, for a given **food sample** analysed and identified by a unique 'labSampCode' (sample identification number), the 'prodCode', 'prodTreat', 'prodText' and 'prodCom' have to be consistently and exactly the same for each analytical results reported. The list of the sample related SSD data variables most frequently reported are the following ones<sup>9,10</sup>: **labSampCode**, labSubSampCode, **sampCountry**, **origCountry**, origArea, origFishAreaCode, origFishAreaText, procCountry, procArea,

<sup>9</sup> The SSD data elements listed in **bold** characters are those mandatory in the frame of the SSD data model for the pesticide monitoring data collection.

<sup>10</sup> The **sample** descriptors must be constant (the same) for all records with the same 'Laboratory sample code' (labSampCode). The descriptor data elements are: lang, sampCountry, sampArea, origCountry, origArea, origFishAreaCode, origFishAreaText, procCountry, procArea, EFSAProdCode, prodCode, prodText, prodProdMeth, prodPack, prodTreat, prodBrandName, prodManuf, prodIngred, prodY, prodM, prodD, expiryY, expiryM, expiryD, sampY, sampM, sampD, progCode, progSampStrategy, progType, sampleNum, lotSize, lotSizeUnit and sampPoint.

**prodCode**, prodText,<sup>11</sup> **prodProdMeth**, prodPack, **prodTreat**, prodBrandName, prodManuf, prodCom, **sampY**, sampM, sampD, progCode, **progLegalRef**, **progSampStrategy**, **progType**, **sampMethod** and sampPoint.

Starting with the 2016 data collection, a new data validation rule has been created: if the 'prodText' and/or the 'prodCom' are reported, then they have to be reported with the same free text for all single determinations belonging to the same sample (see also Appendix D).

To summarise, the reporting of the 'prodText' is mandatory only under certain conditions. The 'prodText' data element has to be obligatory in the following cases, resulting in Error or Warning message, as appropriate (see also Section 2.3 and Appendix D) if they are not provided:

- For samples taken in the frame of Regulation (EC) No 669/2009 on reinforced import control, if samples are taken for Chinese celery, coriander leaves, basil (holy, sweet), mint, chilli peppers and sweet/bell peppers one of the exact strings listed in Table 1 shall be reported; an **Error** message is returned upon data validation if the above condition is not met.
- If the 'prodCode' XXXXXXA 'Not in list' is selected and no 'prodText' is reported, the automated data validation will return an **Error** message to the data provider.

In addition to the above, please consider that the reporting of the 'prodText' is 'Optional, but strongly recommended' for the below listed situations; in these cases, the data validation procedures will not generate Error nor Warning messages for the data transmissions that do not meet the below recommendations:

- For 'processed' food samples and:
  - when the unspecific 'prodTreat' code T100A 'Processed' is selected;
  - when the general 'prodTreat' codes are selected:
    - T104A 'Oil production': This code should be used for vegetable oils (e.g. oilseeds and nuts oil).
    - T110A 'Milling': This general code should be used only for food samples for which more specific codes are not available, like for wheat germ or gluten; in the latter case, please provide the description of the food item in the 'prodText'. Please remember also that this code should not be used for minced, ground or chopped products, e.g. ground poppy seed or spices (see code T999A 'Unprocessed' in Table 2).
    - T122 'Production of alcoholic beverages': This code should be used for beer (in combination with barley, which is the main ingredient) or for spirits produced from fruit, but not for wine from grapes.
    - T123A 'Wine production': This is the general code for wine production; however, more specific codes are available and recommended for the coding of different typology of wine (e.g. white or red). However, if code T123A is selected, the 'prodText' can be used for reporting, e.g. 'grape most'.
    - T134A 'Churning': General code for the dairy products reporting; in case the more specific codes are not used (T152A, T153A, T154A and T155A for coding samples of butter, cheese, cream, and yogurt, respectively) please provide a description of the sample tested in 'prodText'.
- If the 'prodCode' P1040000A 'Honey and other apicultural products' is selected, the automated data validation will automatically generate a Warning message, which will recall the data provider to fill in the 'prodText' data element in case the sample analysed was not honey, but another apicultural products; if no 'prodText' will be returned, EFSA will assume the sample taken was honey at such.
- If the 'prodCode' code P1100000A 'Fish, fish products' (e.g. 'Trout') or P1200000A 'Crops exclusively used for animal feed' (e.g. 'Wheat straw') are selected, more detailed descriptions in the 'prodText' data element is desirable.
- In case samples of 'composite food' have been analysed, the results for this type of food should be reported using the 'prodCode' for the main ingredient. In the field 'prodText', the product tested can be described in more detail (e.g. 'Pizza made of wheat flour, tomatoes and cheese').

<sup>11</sup> Mandatory, only under certain conditions. See also page 10.

### 2.3. Product treatment ('prodTreat', SSD data element S.17)

For processed products derived from raw agricultural products (as specified in Annex I of Regulation (EC) No 396/2005), the most specific code for processing has to be selected from the SSD catalogue PRODTR. Typical processed products are juices, canned vegetables, olive oil, wine, wheat flour and butter. Food products falling under the EU legislation on food for infants and young children shall always be reported as 'Processed'.

On the basis of the 2015 pesticide monitoring data, it turned out that the existing 'prodTreat' code T134A 'Churning' (to be applied to for dairy products, except for pasteurised milk, which should be coded with T150A 'Milk pasteurization') was not sufficient to allow the discrimination between the different types of processed dairy product, e.g. whether the sample taken was cheese, butter, cream, etc. As a result, new 'prodTreat' codes for dairy products have been allocated in the PRODTR catalogue, which are selectable starting from the 2016 pesticide data collection.

The full list of 'prodTreat' codes that can be selected from the catalogue PRODTR are reported in **Table 2**; there, the new codes for the 2016 data collection – compared to the previous data collections - are reported in **bold font**.

**Table 2:** Codes to be used to describe processed/unprocessed products (PRODTR catalogue)<sup>(a)</sup>

<b>ProdTreat code<sup>(b)</sup></b>	<b>Code description</b>	<b>Note</b>
T100A	Processed	This is the general code to be used for coding processed products that cannot be described with other, specific codes reported in this table. If this code is selected, more details on the type of product should be reported in the data element 'ProdText' Food for infants and young children as defined in the baby food legislation (Directive 2006/125/EC and Directive 2006/141/EC and their amendments) should always be coded as 'Processed' ('prodTreat' code 'T100A') See also T103A 'Juicing', T104A 'Oil production' and Section 2.2
T101A or T102A	Peeling	Products that were analysed after peeling. In general, the pesticide monitoring analytical results for food products with peel should be reported for the unpeeled product (e.g. bananas including the peel); only in exceptional cases, the peeled products should be analysed before checking the sample compliance against the MRL (please check the product description in Annex I of Regulation (EC) No 396/2005 first) This code should <u>not</u> be used for products like shelled nuts or for husked cereals
T103A	Juicing	For fruit or vegetables juices (e.g. orange juice and carrot juice) This code should <u>not</u> be used for products like almond milk, soya milk, rice milk: these products should be coded with the code T100A 'Processed' See also T100A 'Processed'
T104A	Oil production	For vegetable oils more specific codes for different types of oil processing are available (T105A–T109A); however, to facilitate the EFSA data analysis it is recommended to use only the code T104A This code should be used for oilseeds and nuts, but <u>not</u> for products that are used for production of essential oils (e.g. orange oil); for the latter type of products please use T100A and provide more detailed information in 'prodText' See also T100A 'Processed' and Section 2.2

ProdTreat code <sup>(b)</sup>	Code description	Note
T110A	Milling	The generic code for milling should be used only for milled cereal products, <u>except</u> for wholemeal flour, refined flour and cereal bran, for which specific codes are available (see T111A, T112A and T113A). Thus, this code may be used for products such as wheat germs and gluten If the 'prodTreat' code T110A is used, a more detailed description of the product analysed should to be provided in the field 'prodText' The code should <u>not</u> be used for minced, ground or chopped products (e.g. ground poppy seed or spices) See also T100A 'Processed', T999A 'Unprocessed' and Section 2.2
T111A	Milling – unprocessed flour	Code to be selected for wholemeal flour only
T112A	Milling – refined flour	Code to be selected for refined (white) flour only
T113A	Milling – bran production	Code to be selected for cereal bran only
T114A	Polishing	Code to be selected for cereal polishing only; it applies to polished (white) rice, oats flakes or barley (pearl barley)
T116A	Sugar production	Extraction of sugar; it applies to sugar produced from cane or sugar beet
T120A	Canning	Code for canned fruit or vegetables, usually in brine (e.g. canned tomatoes, pineapples, beans, table olives). It should also be used for pickled products (e.g. gherkins). The products should be analysed after removing of the brine. Often a clear distinction between canning and preserving is not possible See also T121A 'Preserving'
T121A	Preserving	This code should be used for jams and marmalades (e.g. strawberry jam, orange marmalade, apple sauce and ketchup). For products in brine the use of the code T120A 'Canning' is recommended See also T120A 'Canning'
T122A	Production of alcoholic beverages	This code should be used for beer (in combination with barley 'prodCode', which is the main ingredient) or for spirits produced from fruit, but not for wine made of grapes or other fruits (see also code T123A 'Wine production')
T123A	Wine production	General code for products related to the production of wine made of grapes or other fruits like apple wine, including must. In case must samples are reported, please specify it in the 'prodText' data element More specific codes for white wine and red wine are available as well (see codes T124A and T125A) This unspecific code can be used to report rosé wine as well See also T122A 'Production of alcoholic beverages' and Section 2.2
T124A	Wine production – white wine	See also T123A 'Wine production' and Section 2.2
T125A	Wine production – red wine	See also T123A 'Wine production' and Section 2.2
T128A	Cooking in water	Code to be selected for food products that underwent boiling or poaching (e.g. precooked potatoes)
T129A	Cooking in oil (frying)	For products fried in hot oil (e.g. deep-fried potatoes chips and doughnuts)

ProdTreat code <sup>(b)</sup>	Code description	Note
T130A	Cooking in air (baking)	For products that were baked or roasted at a high temperature in air (e.g. bread, roasted coffee beans, baked potato chips or roasted peanuts)
T131A	Dehydration	Applies to dried products (e.g. grapes (raisins), plums, apricots, dates, dry potato flakes, fungi, dried basil leaves etc.) This code should <u>not</u> be used for dried products that correspond with the description in Annex I of Regulation 396/2005 (e.g. dry pulses, tea, herbal infusions such as dried ginger roots, cereals dried to standard moisture content), which should be reported as 'Unprocessed' See also T999A 'Unprocessed' and T132A 'Fermentation', plus <b>Examples 3 and 4</b>
T132A	Fermentation	Fermentation for purposes other than the production of alcoholic beverages; this code applies to e.g. cabbage and soya sauce (see also T121A 'Production of alcoholic beverages') This code should <u>not</u> be used for fermented tea, fermented cocoa beans, for wine of grapes or other fruits and for fermented milk products. See also T100A 'Unprocessed', T123A 'Wine production' and T134A 'Churning'
T134A	Churning	General code for products obtained from milk of animal origin (only if no more specific codes exist) In case this code is selected, more details on the type of product analysed should be reported in the 'prodText' data element. See also Section 2.2 This code should <u>not</u> be used for pasteurised or sterilised milk (see code T150A)
<b>T152A</b>	<b>Churning – butter</b>	Churning for the sole production of butter of animal origin. Please see also the document Sections 2.6 and 2.7 on the data elements 'fatPerc' and 'exprRes' and Example 6
<b>T153A</b>	<b>Churning – cheese</b>	Churning for the sole production of cheese of animal origin. Please see also the document Sections 2.6 and 2.7 on the data elements 'fatPerc' and 'exprRes' and Example 6
<b>T154A</b>	<b>Churning – cream</b>	Churning for the sole production of cream of animal origin Please see also the document Sections 2.6 and 2.7 on the data elements 'fatPerc' and 'exprRes' and Example 6
<b>T155A</b>	<b>Churning – yogurt</b>	Churning for the sole production of yogurt or kefir of animal origin. Please see also the document Sections 2.6 and 2.7 on the data elements 'exprRes' and 'fatPerc' and Example 6
T136A	Concentration	For product after removing of a part of the water or other constituents (e.g. for concentrated orange juice or condensed milk) For dry products use the 'Dehydration' code (T131A) instead
T148A	Wet-milling	Code applicable to describe starch (e.g. maize starch and rice starch)

ProdTreat code <sup>(b)</sup>	Code description	Note
T150A	Milk pasteurisation	This code can exclusively be used for milk of animal origin Pasteurised or sterilised milk should be coded as described here below Animal milk samples (cow, goat, sheep, etc.) that have been pasteurised, filtrated, sterilised and/or subjected to other treatments with the purpose to extend their shelf-life have to be reported with T150A In the data analysis, the results for milk samples reported with T150A 'Milk pasteurisation' will be pooled by EFSA with milk samples reported as 'Unprocessed' milk T999A See also T134A 'Churning' and T151A 'Pasteurisation'
T151	Pasteurisation	This code can be used for all pasteurised food (e.g. pasteurised eggs), except for pasteurised milk See also code T150A 'Milk pasteurization'
T998A	Freezing	The MRL established under Regulation (EC) No 396/2005 equally apply to fresh/chilled and frozen products, as long as the product was not subject to any additional processing. Thus, frozen samples coded with T998A will be considered in the data analysis performed by EFSA as 'Unprocessed' Please note that this code should not be used if the product was frozen after the sampling See also T999A 'Unprocessed'
T999A	Unprocessed	If the food product analysed fully complies with the description in the last column of Regulation (EU) No 752/2014, a product should be reported as 'Unprocessed' For food products that are reported as being unprocessed, the legal limits set in Regulation (EC) No 396/2005 are directly applicable without the need to apply a processing or peeling factors; this applies also to chilled products (e.g. chilled fresh herbs), to fermented tea or to fermented cocoa beans Fresh and chilled samples are considered as 'Unprocessed' samples. Also, samples that have been ground, crushed, milled, powdered and/or pulverised have to be coded as 'Unprocessed' samples (code T999A), as long as the process does not involve a separation of a certain fraction (like milling of cereals). For example, the code T999A 'Unprocessed' samples also applies to dry spices marketed e.g. in glasses. See also T132A 'Fermentation' and T998A 'Freezing'

(a): On the basis of the past experience on the processed food results reported to EFSA, the codes reported in the table are to be considered as the codes most appropriate for the pesticide data collection. However, in exceptional cases, different codes could be selected, as suitable.

(b): The codes reported in **bold** font are new compared to the previous data collections.

In the below examples, more explanations are reported (**Examples 3, 4 and 5**).

### Example 3 : How to report results for dry peas (pulses)

Data element	Element value (catalogue)	Code description	Note
<b>prodCode</b>	P0300030A (MATRIX)	Peas (dry)	Peas (dry seeds) are classified in the MRL food group of 'pulses'. The code P0260040A applies to fresh peas and should <u>not</u> be used for peas (dry) classified in the group of pulses

Data element	Element value (catalogue)	Code description	Note
prodTreat	T999A (PRODTR)	Unprocessed	The prodTreat code T131A 'Dehydration' is not appropriate in this case. If the sample analysed complies with the description of Annex I of Regulation (EC) No 396/2005, the product is considered as being 'Unprocessed'. Drying of pulses to reach standard moisture content (ca 15–19%) is not considered as processing

**Example 4 :** How to report results for green peas (without pods)

Data element	Element value (catalogue)	Code description	Note
prodCode	P0260040A (MATRIX)	Peas (without pods)	Fresh peas without pods are not classified in the MRL group of 'pulses'. They are classified in the MRL food group of 'Legume vegetables' 0260000 and the sample is made up of the whole product (only fresh pea seeds)
prodTreat	T999A (PRODTR)	Unprocessed	The prodTreat code T131A' Dehydration' <u>cannot</u> be selected in this case

**Example 5 :** How to report a sample of a pasteurised food (e.g. pasteurised eggs)

Data element	Element value (catalogue)	Code description	Note
prodCode	P1030010A (MATRIX)	Eggs (chicken)	According to Annex I of Regulation 396/2005, the MRL shall be checked against the residue level measured in the whole product after removal of the shell
prodText	'Pasteurised free-range eggs from organic farming'		Describe in detail the nature of the product analysed
prodTreat	T151A (PRODTR)	Pasteurisation	The code 'Pasteurisation' shall not be selected for pasteurised milk, for which the specific 'prodTreat' code T150A ('Milk pasteurisation') shall be chosen

## 2.4. Month and day of sampling ('sampM', SSD data element S.29 and 'sampD', SSD data element S.30)

The year of sampling ('sampY' SSD data element) is a mandatory information to be reported for the pesticide monitoring data collection, while the month ('sampM') and day ('sampD') of sampling are to be reported on a voluntarily basis. However, the information reported in the latter two data elements is crucial to check the sample compliance against the pesticide MRL applicable at the time of sampling; in addition, upon data transmission, EFSA performs some data plausibility cross-checks among the SSD data elements on the result evaluation ('resEvaluation') and the numerical value of both the reported quantified residue ('resVal') and the reported MRL for the given combination pesticide/food item tested ('resLegalLimit'); where the MRL is not reported by the data provider – which is almost always the case – then EFSA will in the future check the plausibility of the reported information taking into consideration the MRL applicable at the day of sampling; at the moment, considering the underreporting of the complete data of sampling, EFSA perform the data plausibility considering the MRL applicable at the first day of the monitoring year. This check is performed by EFSA considering only the 'Unprocessed' samples.

Taking into account the above, EFSA would strongly encourage the reporting of the month ('sampM') and day ('sampD') of sampling, in particular for the 'unprocessed' food samples.

## 2.5. LOD for the result ('resLOD', SSD data element R.14)

The 'resLOD' (the numerical value of the limit of detection) is not a mandatory element for the pesticide monitoring data collection<sup>12</sup>; the LOD can be reported at discretion of the reporting country, in addition to the 'resLOQ' value. However, if the LOD values are available at national level, EFSA warmly recommends reporting them. The reason for this is that starting from the 2016 data collection EFSA will explore the possibility to use the 'resLOD' to perform more detailed risk assessment under certain residue scenarios and where applicable (see also Section 2.8 on 'resType').

In the EFSA Guidance document for the previous year's data collections, a definition of LOD was not proposed; in general terms, the LOD is the lowest concentration that can be determined to be statistically different from a 'blank' analytical result. The LOD shall be always expressed in mg/kg.

The reporting of the resLOD is fully optional and only for the reporting countries that consider their LOD acceptable in terms of analytical method validation at national level. While preparing the 2016 Report on Pesticide Residues in Food, EFSA will consider the resType = LOD as equivalent to the resType = LOQ. Thus, if reported, at the moment the resLOD will only be considered by EFSA to test the feasibility of a, new risk assessment methodology.

If the resLOD is reported, a set of data validation checks will be applied to the element 'resLOD'; those checks closely follow the rules applicable to 'resLOQ' data element (please see also Appendix D):

- The value in 'resLOD' must be less than or equal to the value in 'resLOQ';
- The value in 'resLOD' must be greater than 0;
- If the value in the data element 'Type of result' (resType) is equal to 'Non Detected Value (below LOD)' (LOD), then a value in 'resLOD' must be reported;
- The 'resLOD' shall be only reported in mg/kg.

Please, see also Section 2.8 on Type of the Result ('resType').

## 2.6. Percentage of fat in the original sample ('fatPerc', SSD data element R.24)

This data element is not mandatory and is not relevant for unprocessed plant commodities. For processed plant products, unprocessed and processed products of animal origin this data element may be relevant since the residue concentration in the samples analysed may be influenced by the fat content of the product (e.g. accumulation of fat-soluble pesticides in the fraction with higher fat content compared with the unprocessed product).

The information on the fat content is of high importance for milk and milk derived products, in particular for pesticide residue definitions marked as fat soluble (indicated by the suffix 'F' in the MRL legislation and in the EFSA MatrixTool) because the MRL values set in Regulation (EC) No 396/2005 apply to milk with a default fat content of 4%. For raw milk of other species than cows, the MRL value shall be adjusted proportionally according to the fat content of the raw milk of that species. Also for processed milk products (e.g. cheese and butter), an adjustment of the MRL is necessary, taking into account the fat content of the product. Thus, for checking MRL compliance for fat-soluble residues the fat content of the sample analysed has to be known (see also Section 2.10). For cheese and other milk products, the fat content should be expressed as percentage of the whole product (see also Example 6) and not the fat content in the dry matter (please note that the fat content reported on the labels of cheese is often expressed on dry matter basis).

If no fat content is reported for milk and milk products reported with 'exprRes' the code B001A ('Whole weight basis'), EFSA will assume the sample analysed contained 4% fat. See also Section 2.7.

## 2.7. Expression of result ('exprResCode', SSD data element R.25)

For this mandatory data element, only three codes can be selected: B001A ('Whole weight'), B003A ('Fat weight') and B007A ('Reconstituted product'). The selection of the code B003A can only be used to report fat-soluble pesticides (indicated by the suffix 'F' in the MRL legislation and in the EFSA MatrixTool) in combination with a few prodCodes (MATRIX catalogue) for certain animal products and only under certain conditions (please refer to **Table 3** and Example 6).

<sup>12</sup> In the EFSA Guidance document for the previous year's data collections, a definition of LOD was not proposed; in general terms, the LOD is the lowest concentration that can be determined to be statistically different from a 'blank' analytical result. The LOD shall be always expressed in mg/kg.



Compared to the past, no changes have been introduced on the Expression of result codes and their use for the 2016 pesticide monitoring data collection.

**Table 3:** Codes to be used to describe how the result of the analytical determination is expressed (EXRES catalogue)

Element value	Code description	Note
B001A	Whole weight	This code can be used for all products (unprocessed and processed) and for which the provisions of Regulation (EC) No 396/2005 apply. If the code B001A is used, the results should be expressed for the product analysed and described with the data elements 'prodCode', 'prodText' and 'prodTreat'
B003A	Fat weight	The code B003A can only be used for <u>fat soluble pesticides</u> in combination with the following prodCodes (MATRIX catalogue): P1020000A or a subcode: milk and products obtained from milk of animal origin, e.g. butter, cheese and yogurt P1030000A or a subcode: eggs and processed products derived from eggs Results reported in combination with the code B003A have to be expressed on the basis of the fat content of the product analysed. For more guidance, please see Example 6 In addition, in case the result is reported with the 'exprRes' code B003A, then it becomes mandatory to report the numerical value of the fat percentage in the original sample in the data element 'fatPerc' (see also Example 6)
B007A	Reconstituted product	This code can only be used for the reporting of results for food products for infants and young children (that are covered by Directive 2006/125/EC and Article 10(4) of Directive 2006/141/EC and their amendments) that are consumed only after dilution/reconstitution. In this case, the analytical result should be expressed for the product reconstituted according to the instructions of the manufacturer reported on the label (see Article 7(4) of Directive 2006/125/EC and Article 10(4) of Directive 2006/141/EC)
B001A	Whole weight	This code can be used for all products (unprocessed and processed) and for which the provisions of Regulation (EC) No 396/2005 apply. If the code B001A is used, the results should be expressed for the product analysed and described with the data elements 'prodCode', 'prodText' and 'prodTreat'
B003A	Fat weight	The code B003A can only be used for <u>fat soluble pesticides</u> in combination with the following prodCodes (MATRIX catalogue): P1020000A or a subcode: milk and products obtained from milk of animal origin, e.g. butter, cheese and yogurt P1030000A or a subcode: eggs and processed products derived from eggs Results reported in combination with the code B003A have to be expressed on the basis of the fat content of the product analysed. For more guidance, please see Example 6 In addition, in case the result is reported with the 'exprRes' code B003A, then it becomes mandatory to report the numerical value of the fat percentage in the original sample in the data element 'fatPerc' (see also Example 6)
B007A	Reconstituted product	This code can only be used for the reporting of results for food products for infants and young children (that are covered by Directive 2006/125/EC and Article 10(4) of Directive 2006/141/EC and their amendments) that are consumed only after dilution/reconstitution. In this case, the analytical result should be expressed for the product reconstituted according to the instructions of the manufacturer reported on the label (see Article 7(4) of Directive 2006/125/EC and Article 10(4) of Directive 2006/141/EC)

**Example 6 :** How to report the results for processed milk products (e.g. butter) for a fat soluble pesticide with an MRL above the Limit of Quantification (LOQ)

Data element	Element value (catalogue)	Code description	Note
prodCode	P1020010A (MATRIX)	Milk (cattle)	
prodText	Butter		Data element to be used to describe in detail the nature of the product analysed
prodTreat	T152A (PRODTR)	Churning – butter	Code to be used exclusively for butter samples of animal origin
paramCode	RF-0237-001-PPP (PARAM)	Hexachlorobenzene	It is noted that the legal residue definition for hexachlorobenzene is labelled with the suffix (F) in the MRL legislation (i.e. this pesticide is lipophilic); the results can be reported on fat basis (code B003A for data element 'exprRes') or on whole weight basis (code B001A). In this example, the result is reported on fat basis
resLOQ	0.01		Numerical value for the LOQ of the analytical method used to analyse the sample and expressed in mg/kg fat. If for 'exprRes' the code B003A is used, the 'resLOQ' also refers to the LOQ for fat (not recalculated to milk)
resLOD	0.005		Not mandatory information, but it is recommended to report it, if available. Similar to the resLOQ, resLOD should refer to the LOD for fat (not recalculated to milk)
resVal	0.3		The residue concentration measured in the sample (expressed on fat basis, i.e. as mg/kg <u>fat</u> )
resType	VAL		Residue numerically quantified above the resLOQ
resLegalLimit	0.25		The hexachlorobenzene MRL for milk is 0.01 mg/kg. If the result is reported on fat basis (B003A in the 'exprRes' data element), the MRL has to be recalculated to milk fat using a factor of 25 (MRL set for milk with default fat content of 4%). Then, the in data element 'resLegalLimit' the recalculated limit of $0.01 \times 25 = 0.25$ should be reported
fatPerc	80		If for the data element 'exprRes' the code B003A is used, the sample as <u>analysed</u> is considered made up of 100% fat (isolated fat from the original sample) The data element 'fatPerc' refers to fat percentage in the <u>original sample taken</u> , and not the analysed fat portion of the sample. Thus, in this example, the 'fatPerc' could be, e.g. 80%. The 'fatPerc' shall be reported with a figure greater than zero, but below or equal to 100 Please note that for results reported with the 'exprRes' code B003A, it becomes mandatory to report the numerical value of the fat percentage in the original sample. See also Section 2.6
exprRes	B003A (EXRES)	Fat weight	The code B003A can be used only for processed/unprocessed milk products and for processed/unprocessed eggs for pesticides that are labelled as fat soluble in the EU legislation
resEval	J031A (RESEVAL)	Compliant due to measurement uncertainty	The residue level measured in the fat portion of the sample (0.30 mg/kg fat) is greater than the MRL for milk recalculated to milk fat (0.25 mg/kg fat), but below the MRL taking into account the analytical method uncertainty of 50%

The above example (Example 6) would also apply for the reporting of the results of fat soluble pesticides analysed in the unprocessed (raw) milk and processed/unprocessed egg samples, with the only difference being the appropriate selection of the codes for the SSD data elements prodCode, prodTreat and prodText, as appropriate.

The code B001A can be also used for milk and eggs, typically for pesticides that are not fat soluble, but also for fat soluble substances, as described in Example 16 of the previous guidance document (EFSA, 2015).

For the 2016 data collection, the selectable 'exprRes' codes are not changed compared to the previous data collection. Therefore, examples 15, 17, 18 and 19 of the 2014 data collection guidance document (EFSA, 2015) and the examples 4 and 5 of the 2015 data collection guidance document (EFSA, 2016) are still valid. The data providers should carefully consider the following directions:

- If results on milk samples (P1020000A, P1020010A, P1020020, P1020030A, P1020040 or P1020990A) are reported in combination with 'exprRes' **B001A** ('Whole weight basis') and if the 'fatPerc' is not reported, EFSA will assume a fat content equal to 4%.
- If results on egg samples (P1030000A, P1030010A, P1030020A, P1030030A, P1030040A or P1030990A) are reported in combination with 'exprRes' **B001A** ('Whole weight basis') and if the 'fatPerc' is not reported, EFSA will assume a fat content equal to 10%.
- If the results for **fat-soluble pesticides** in milk/egg samples are reported on whole weight basis (code B001A), then the 'fatPerc' should be reported for milk (including processed milk products) or eggs (including processed eggs) in cases where the fat content is different than the default fat content of milk (i.e. 4%) or eggs (i.e. 10%).
- The 'exprRes' code **B003A** can only be used to report results on fat soluble pesticides in samples of milk of animal origin (P1020000A, P1020010A, P1020020, P1020030A, P1020040 or P1020990A) or for egg samples (P1030000A, P1030010A, P1030020A, P1030030A, P1030040A or P1030990A).
- If the result is expressed on fat basis (code **B003A**), then the 'fatPerc' should not be left blank.
- 'FatPerc' has to be between 0 and 100, independently from the 'exprRes' code selected.

The 'exprRes' code **B007A** can only be reported for the MATRIX (BabyFood) codes PX100000A, PX100001A, PX100003A, PX100004A or PX100005A.

## 2.8. Type of result (resType, R.27)

This data element is mandatory. Starting from the 2016 data collection, four codes are selectable for the type of result; thus, compared to the previous year's data collection, also the 'resType' code 'LOD' would be accepted. The description of the codes and the cases where to use them can be found in **Table 4**. In the future, the results reported with the 'resType' LOD might be used by EFSA for assessing new different scenarios in estimating the consumer's chronic exposure to pesticide residues (see also Section 2.4).

**Table 4:** Type of Result codes (VALTYP catalogue) selectable starting for the 2016 data coding<sup>(a)</sup>

VALTYP code	Code description	Note
VAL	Numerical Value	If the residue specified in the field paramCode was quantified at or above the LOQ, the data element must be completed with the code 'VAL'. Thus, the numerical value of determination reported in the data element resVal has to be equal or greater than the LOQ of the analytical method reported in the data element 'resLOQ'
LOQ	Non-quantified Value (< LOQ)	If the measured residue concentration was below the LOQ, then the element resType shall be completed with the code 'LOQ'. In this case, the data element 'resVal' should be left blank
<b>LOD</b>	<b>Non-detected Value (&lt; LOD)</b>	If the detected residue concentration was below the LOD, then the element 'resType' shall be completed with the code 'LOD'. In this case, the data element 'resVal' should be left blank
BIN	Qualitative Value (Binary)	If a sample was analysed with a screening method and the result was below the LOQ, the result type has to be labelled with BIN. In this case, the data element 'resVal' should be left blank In the field 'resLOQ' the reporting value of the screening method (expressed in mg/kg) should be reported

(a): The new code introduced for the 2016 pesticide monitoring data coding is reported in the table in **bold** font.

## 2.9. Action taken ('actTakenCode', SSD data element R.31)

The data element 'actTakenCode' should be used to describe actions taken with regard the legal provisions under the EU MRL legislation (Regulation 396/2005). Thus, the code in the ACTION catalogue should be used each time any enforcement action was taken because of infringements of the EU MRL.<sup>13</sup>

The experts of the Pesticide Monitoring Network expressed their wish to add new codes in the ACTION catalogue not only to identify actions taken as a consequence of MRL violations, but also to highlight that actions were taken for other reasons, e.g. the presence of a pesticide in samples produced in the EU that is not approved at European level according to Regulation 1107/2009<sup>14</sup> or the presence of a pesticide residue (within the legal limit) in organic products that is not permitted for organic farming. Considering this, EFSA has allocated three new codes; these can be selected starting from the 2016 data collection, while the already existing codes in the ACTION catalogue remain unchanged and selectable (**Table 5**).

In case more detailed information on the specific action taken should be reported (e.g. the possible reason for the observed MRL exceedances), this can be provided in the data element 'resComm' (SSD data element R.32, see also paragraph 6.5 of the 2014 data collection Guidance, EFSA 2015).

**Table 5:** ACTION codes selectable starting for the 2016 data coding<sup>(a),(b)</sup>

<b>ACTION code<sup>(c)</sup></b>	<b>Code description</b>	<b>Note</b>
A	Administrative consequences	
B	Intensified checks before release	
<b>C</b>	<b>Follow-up action due to a residue of a pesticide detected in EU samples, which is not approved for use in the EU territory</b>	Code to be selected in cases the use of the quantified pesticide is <u>not</u> approved at EU level, then the provisions of Regulation (EU) No 1107/2009 were violated
D	Denial of community aid	
E	Destruction of animals and/or products	
F	Follow-up (suspect) sampling	
<b>G</b>	<b>Follow-up action due to the residues of a pesticide detected in domestic products, which is not authorised in the country</b>	Code to be selected in case the use of the quantified pesticide is <u>not</u> authorised in the country of origin of the sample (e.g. in domestic samples), then the provisions of Regulation (EU) No 1107/2009 were violated
I	Follow-up investigation	
M	Lot not released on the market	
N	No action	
O	Other	
<b>P</b>	<b>Follow-up action due to a pesticide residue detected in organic samples, violating the provisions laid down in the organic farming legislation</b>	Code to be selected to flag those results concerning the analysis of an organic food samples and indicating a violation of the provisions laid down in the organic farming legislation. Thus, this code should be used to indicate that follow-up actions were taken in case the quantified pesticide is not allowed in organic farming or to flag the 'non-intended (e.g. contamination) of the non-authorised substance in organic food

<sup>13</sup> This is particular important for samples taken in the framework of Regulation (EC) No 669/2009 during the border inspections, e.g. it should be reported whether a sample that was found non-compliant with the EU MRL was rejected at the border, or whether the lot was available for consumption in the EU territory.

<sup>14</sup> Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC. OJ L 309, 24.11.2009, p. 1–50.

<b>ACTION code<sup>(c)</sup></b>	<b>Code description</b>	<b>Note</b>
R	Rapid Alert Notification	
S	Lot recalled from the market	
V	Movement restriction	
W	Warnings	

(a): The new codes introduced for the 2016 pesticide monitoring data coding are reported in the table in **bold** font.

(b): For results not compliant with the EU MRL, the 'actTakenCode' should always be completed.

(c): The ACTION taken codes shall be reported always in capital letters (e.g. 'A' and not 'a') and in case multiple codes are for the same analytical result, the single codes from the ACTION catalogue should be linked using the '\$' separator (e.g. R\$\$C).

## 2.10. Evaluation of the result ('resEvaluation', SSD data element R.30)

From the 2015 pesticide monitoring data analysis, it resulted that some determinations were reported as not compliant with the EU MRLs even though this was not the case. Thus, the reporting countries have considered the 'not approved/not authorised use' of the tested pesticides and reported those as MRL non compliances. Therefore, it is reminded that the 'resEval' codes J003A and J031A (see **Table 6**) should only be selected when the analytical measurements are considered by the national competent authorities as compliant with the EU MRL established in Regulation (EC) No 396/2005 or compliant with the MRL applicable for baby food (see also **Table 5**). Thus, evaluation of the results should not be performed considering the legal provisions on the approved/authorised uses (e.g. infringements of provisions of Regulation (EC) No 1107/2009).

Example 7 provides for more clarification on this issue.

**Table 6:** RESEVAL codes selectable for the pesticide monitoring data reporting

<b>RESEVAL code</b>	<b>Code description</b>	<b>Note</b>
<b>J002A</b>	≤ maximum permissible quantities	This code has to be used if the residue concentration measured in the sample and reported in the data element 'resVal' was numerically below or at the MRL applicable for this determination, <u>i.e. the MRL reported in 'resLegalLimit' or – if not reported - set in the EU MRL legislation</u>
<b>J003A</b>	> maximum permissible quantities	This code has to be used where the result was found clearly <u>exceeding the legal limit</u> (taking into account the measurement uncertainty)
<b>J031A</b>	Compliant due to measurement uncertainty	Results that numerically exceeded the legal limit, but for which no legal sanctions were imposed taking into account the measurement uncertainty
<b>J029A</b>	Result not evaluated	To be used for results for which the reporting country did not assess the compliance/non-compliance, for example: for products for which no EU nor national MRLs are in place (e.g. feed, fish, composite food) or for substances for which no EU or national MRLs are in place (e.g. synergists) or for determinations that are labelled with P002A in the data element 'paramType' or if the analytical method was not sensitive enough to check MRL compliance (LOQ > MRL)

**Example 7** : How to report the not authorised uses of a given pesticide

Data element	Element value (catalogue)	Code description	Note
<b>prodCode</b>	P0110020A (MATRIX)	Oranges	According to Annex I of Regulation (EC) No 396/2005, orange samples shall be checked for compliance against the MRL when the pesticide residues are analysed in the whole oranges (including the peel)
<b>prodText</b>	'Whole, fresh oranges with peel'		
<b>prodTreat</b>	T999A (PRDTR)	Unprocessed	
<b>paramCode</b>	RF-0522-001-PPP	Butocarboxim	The use of this active substance is not approved at EU level
<b>resUnit</b>	G061A	Milligram/kilogram	
<b>resLOQ</b>	0.010		
<b>resVal</b>	0.015		
<b>exprRes</b>	B001A (EXRES)	Whole weight	The result should be reported for the product analysed (in this case, the whole oranges)
<b>resType</b>	VAL		Residue quantified above the LOQ
<b>resLegalLimit</b>	0.010		According to Art 18(1)(b) of Reg (EC) No 396/2005, for this substance the default MRL of 0.01 mg/kg applies
<b>resLegalLimitType</b>	W002A	Maximum Residue Level (MRL)	
<b>resEvaluation</b>	J031A	Compliant due to measurement uncertainty	The analytical result has to be evaluated against the legal limits set in the MRL legislation and <u>not</u> considering the authorisation/ approval status of the analysed pesticide
<b>actTakenCode</b>	C\$I\$M	Follow-up action due to a residue of a pesticide detected in EU samples, which is not approved for use in the EU territory\$Follow-up investigation\$ Lot not released on the market	The 'actTakenCode' is the only SSD data element where is possible to flag that the measured residue refers to a substance, which is not approved for use in the EU and that follow-up actions have been taken Please use the '\$' separator in cases more than one 'actionTakenCode' is selected Always report these codes with capital letters
<b>resComm</b>	'The sample was found compliant with the pesticide MRL, but the quantified residue is not compliant with Regulation 1107/2009 provisions (not approved substance)'		Free text to provide details on the analytical results

**3. Reporting of the pesticide residue results for samples taken in 2017**

In order to provide timely information for the correct coding of the EUCP samples that will be taken in 2017 in accordance with Regulation (EU) 2016/662<sup>15</sup>, EFSA prepared a table describing the

<sup>15</sup> Commission Implementing Regulation (EU) 2016/662 of 1 April 2016 concerning a coordinated multiannual control programme of the Union for 2017, 2018 and 2019 to ensure compliance with maximum residue levels of pesticides and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin; OJ L 115, 29.4.2016, p. 2–15.

appropriate data coding (Appendix B). Further guidance on the coding and reporting of samples taken in 2017 will be provided at the beginning of 2018.

## References

- EFSA (European Food Safety Authority), 2015. Guidance for reporting data on pesticide residues in food and feed according to Regulation (EC) No 396/2005 (2014 data collection). EFSA Journal 2015;13(7):4196, 61 pp. <https://doi.org/10.2903/j.efsa.2015.4195>
- EFSA (European Food Safety Authority), 2016. Guidance for reporting data on residues of pesticide residues in food and feed according to Regulation (EC) No 396/2005 (2015 data collection). EFSA Journal 2016;14(5):4496, 33 pp. <https://doi.org/10.2903/j.efsa.2016.4496>

## Abbreviations

BR	Business Rule
DCF	Data Collection Framework
EEA	European Economic Area
EUCP	European Co-ordinated control programme
LOD	limit of detection
MRL	maximum residue level
PAD	Public Access to Documents
PF	processing factor
SSD	Standard Sample Description (ver. 1)
TC	Third Countries

## Appendix A – 2016 EU Co-ordinated monitoring programme coding

In the table below, the food commodities included in the 2016 EU Co-ordinated monitoring programme are listed along with the appropriate SSD codes for the food product ('prodCode', S.13), product treatment ('prodTreat', S.17), sampling strategy ('progSampStrategy', S.33) and type of sampling programme ('progType', 3.34).

Food product	prodCode (MATRIX)	prodTreat (PRODTR)	prodTreat description	progLegalRef	progSamp Strategy (SAMPSTR)	progType (SRCTYP)	Note on the food product tested
Apples	P0130010A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of the stems
Head cabbages	P0242020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of roots and decayed leaves
Leeks	P0270060A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of decayed tissues, soil and roots
Lettuces	P0251020A	T999A	Fresh	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of roots and decayed outer leaves and soil
Peaches	P0140030A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of the stems
Strawberries	P0152000A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of the caps, crown and stems
Tomatoes	P0231010A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of the stems
Rye	P0500070A	T999A/T111A/ T112A	Unprocessed/milling – unprocessed flour/milling – refined flour (milling)	N027A	ST10A/ST20A	K009A/K018A	Whole rye grains ('prodTreat' code=T999A). If no sufficient samples of rye grain are available, also rye flour can be analysed, provided that a PF is reported. The 'prodTreat' codes T111A for wholemeal flour) or T112A (for refined flour) should be used. The selection of the code T110A (generic code for milling) is not appropriate
Wine	P0151020A	T124A/T125A/ (T123A)	Wine production - white wine/wine production – red wine/wine production	N027A	ST10A/ST20A	K009A/K018A	The 'prodTreat' codes T124A ('White wine') or T125A ('Red wine') should be used, as appropriate. The unspecific code for wine T123A should be used only for rosé wine



Food product	prodCode (MATRIX)	prodTreat (PRODTR)	prodTreat description	progLegalRef	progSamp Strategy (SAMPSTR)	progType (SRCTYP)	Note on the food product tested
Milk (cattle)	P1020010A	T999A/T998A/ T150A	Fresh/frozen/milk pasteurisation	N027A	ST10A/ST20A	K009A/K018A	Processed cow's milk products (other than fresh/pasteurised or other heat treatment) shall <u>not</u> be taken/reported in the framework of the 2016 EU Co-ordinated programme
Fat (swine)	P1011020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product: fresh/frozen fat
Baby foods other than processed cereal-based foods	PX100001A	T100A	Processed	N028A	ST10A/ST20A	K009A/K018A	If a baby food prodCode is reported, the only valid treatment code is T100A

PF: processing factor.

## Appendix B – 2017 EU Co-ordinated monitoring programme coding

In the table below the food commodities included in the 2017 EU co-ordinated monitoring programme are listed along with the appropriate SSD codes for the food product ('prodCode', S.13), product treatment ('prodTreat', S.17), sampling strategy ('progSampStrategy', S.33) and type of sampling programme ('progType', 3.34).

Food product	prodCode (MATRIX)	prodTreat (PRODTR)	prodTreat description	progLegalRef	progSamp Strategy (SAMPSTR)	progType (SRCTYP)	Note on the food product tested
Oranges	P0110020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product
Pears	P0130020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of stems
Kiwi fruits (green, red, yellow)	P0162010A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of stems
Cauliflowers	P0241020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Curd only
Onions	P0220020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Bulbs
Carrots	P0213020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of tops (if any) and adhering soil
Potatoes	P0211000A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product after removal of tops (if any) and adhering soil
Beans (dry)	P0300010A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Dry seeds
Rye	P0500070A	T999A/T111A	Fresh/milling – unprocessed flour	N027A	ST10A/ST20A	K009A/K018A	Whole rye grains ('prodTreat' code T999A). If no sufficient samples of rye grain are available, also wholemeal/unprocessed rye flour can be analysed, provided that a PF is reported. In this case, the 'prodTreat' code T111A for wholemeal flour should be used. If no specific PF are available, a default factor of 1.0 may be applied
Rice	P0500060A	T999A/ T114A	Fresh/polishing	N027A	ST10A/ST20A	K009A/K018A	Whole/husked/unpolished rice grains ('prodTreat' code T999A). If no sufficient samples of rice grains are available, also polished rice can be analysed, provided that a PF is reported. If no specific PF are available, a default factor of 0.5 may be applied
Fat (poultry) <sup>(a)</sup>	P1016020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product: fresh/frozen fat
Fat (sheep)	P1013020A	T999A/T998A	Fresh/frozen	N027A	ST10A/ST20A	K009A/K018A	Whole product: fresh/frozen fat

Food product	prodCode (MATRIX)	prodTreat (PRODTR)	prodTreat description	progLegalRef	progSamp Strategy (SAMPSTR)	progType (SRCTYP)	Note on the food product tested
Infant formulae	PX100004A	T100A	Processed	N028A	ST10A/ST20A	K009A/K018A	If a baby food prodCode PX100004A is reported, the only valid treatment code is T100A
Follow-on formulae	PX100005A	T100A	Processed	N028A	ST10A/ST20A	K009A/K018A	If a baby food prodCode PX100005A is reported, the only valid treatment code is T100A

PF: processing factor.

(a): According to Table 3 of Directive 2002/63/EC, a sample of minimum 0.5 kg chicken fat should be tested; to reach such an amount of fat 'abdominal fat from at least 3 birds' could be taken.

## Appendix C – Food to be analysed according to Regulation (EC) No 669/2009

In the table below the food commodities, the countries and product treatments covered by the Regulation (EC) No 669/2009 and its amendments relevant for the 2016 control year are listed along with the product code ('prodCode', S.13), country of origin of the product ('origCountry', S.06), the product text ('prodText', S.14), the product treatment ('prodTreat', S.17) and the programme type ('progType', S.34).

Food to be analysed <sup>(a)</sup>	Note on the food to be analysed according to Reg 669/2009	MRL food group/ subgroup according to Reg (EC) No 396/2005	prodCode (MATRIX)	prodText (see Section 2.2)	Country of origin	origCountry (CTRY)	Product treatment	prodTreat (PRODTR)	progType (SRCTYP)	Checks (%) <sup>(b)</sup>
Aubergines		Aubergines/egg plants	P0231030A		Cambodia	KH	Fresh/frozen	T999A/T998A	K019A	50
Chinese celery ( <i>Apium graveolens</i> )		Celery leaves	P0256030A	'Chinese celery leaves'	Cambodia	KH	Fresh	T999A	K019A	50
Yardlong beans ( <i>Vigna unguiculata</i> subsp. <i>sesquipedalis</i> )		Beans (with pods)	P0260010A		Cambodia	KH	Fresh/frozen	T999A/T998A	K019A	50
<i>Brassica oleracea</i> (other edible <i>Brassica</i> , 'Chinese Broccoli')		Broccoli	P0241010A		China	CN	Fresh	T999A	K019A	50
Tea, whether or not flavoured		Teas	P0610000A		China	CN	Fresh	T999A	K019A	10
Aubergines		Aubergines/egg plants	P0231030A		Dominican Republic	DO	Fresh/frozen	T999A/T998A	K019A	10
Bitter melon ( <i>Mormodica charantia</i> )		Courgettes	P0232030A		Dominican Republic	DO	Fresh/frozen	T999A/T998A	K019A	10
Peppers (sweet and other than sweet ( <i>Capsicum</i> spp.))	Sweet and chilli peppers	Sweet peppers/bell peppers	P0231020A	'Sweet/bell peppers' or 'Chili peppers'	Dominican Republic	DO	Fresh/frozen	T999A/T998A	K019A	20
Yardlong beans ( <i>Vigna unguiculata</i> subsp. <i>sesquipedalis</i> )		Beans (with pods)	P0260010A		Dominican Republic	DO	Fresh/frozen	T999A/T998A	K019A	20
Peppers (sweet and other than sweet ( <i>Capsicum</i> spp.))	Sweet and chilli peppers	Sweet peppers/bell peppers	P0231020A	'Sweet/bell peppers' or 'Chili peppers'	Egypt	EG	Fresh/frozen	T999A/T998A	K019A	10
Strawberries		Strawberries	P0152000A		Egypt	EG	Fresh	T999A	K019A	10
Peas with pods (unshelled)		Peas (with pods)	P0260030A		Kenya	KE	Fresh	T999A	K019A	10
Aubergines		Aubergines/egg plants	P0231030A		Thailand	TH	Fresh/frozen	T999A/T998A	K019A	20

Food to be analysed <sup>(a)</sup>	Note on the food to be analysed according to Reg 669/2009	MRL food group/subgroup according to Reg (EC) No 396/2005	prodCode (MATRIX)	prodText (see Section 2.2)	Country of origin	origCountry (CTRY)	Product treatment	prodTreat (PRODTR)	progType (SRCTYP)	Checks (%)( <sup>b</sup> )
Peppers (other than sweet, ( <i>Capsicum</i> spp.))	Chilli peppers	Sweet peppers/bell peppers	P0231020A	'Chilli peppers'	Thailand	TH	Fresh	T999A	K019A	10
Yardlong beans ( <i>Vigna unguiculata</i> spp. sesquipedalis)		Beans (with pods)	P0260010A		Thailand	TH	Fresh/frozen	T999A/T998A	K019A	20
Peppers (sweet peppers, ( <i>Capsicum</i> spp.))	Sweet peppers	Sweet peppers/bell peppers	P0231020A	'Sweet/bell peppers'	Turkey	TR	Fresh/frozen	T999A/T998A	K019A	10
Vine leaves		Grape leaves and similar species	P0253000A		Turkey	TR	Fresh/processed	T999A/T100A	K019A	50
Lemons		Lemons	P0110030A		Turkey	TR	Fresh/dehydrated	T999A/T131A	K019A	10
Basil (holy, sweet)		Basil and edible flowers	P0256080A	'Basil'	Vietnam	VN	Fresh	T999A	K019A	50
Coriander leaves		Celery leaves	P0256030A	'Coriander leaves'	Vietnam	VN	Fresh	T999A	K019A	50
Pitahaya (dragon fruit)		Prickly pears/cactus fruits	P0163040A		Vietnam	VN	Fresh	T999A	K019A	20
Mint		Basil and edible flowers	P0256080A	'Mint'	Vietnam	VN	Fresh	T999A	K019A	50
Okra		Okra/lady's fingers	P0231040A		Vietnam	VN	Fresh	T999A	K019A	50
Parsley		Parsley	P0256040A		Vietnam	VN	Fresh	T999A	K019A	50
Peppers (other than sweet, ( <i>Capsicum</i> spp.))	Chilli peppers	Sweet peppers/bell peppers	P0231020A	'Chilli peppers'	Vietnam	VN	Fresh	T999A	K019A	50

MRL: maximum residue level.

(a): Food as described in one of the implementing regulations of Regulation (EU) No 669/2009.

(b): Frequency of checks according to Regulation (EC) No 669/2009.

## Appendix D – Data validation rules for the 2016 pesticides monitoring data collection<sup>16</sup>

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.01	labSampCode	E	The sample descriptors are not constant for all records with the same labSampCode	The sample descriptors must be constant (the same) for all records with the same 'Laboratory sample code' (labSampCode). The descriptor data elements are: lang, sampCountry, sampArea, origCountry, origArea, origFishAreaCode, origFishAreaText, procCountry, procArea, EFSAProdCode, prodCode, prodText, prodProdMeth, prodPack, prodTreat, prodBrandName, prodManuf, prodIngred, prodY, prodM, prodD, expiryY, expiryM, expiryD, sampY, sampM, sampD, progCode, progSampStrategy, progType, sampleNum, lotSize, lotSizeUnit, sampPoint	For the data elements S.03–S.39: all values in each data elements must be equal for all records with same labSampCode
S.04	sampCountry	E		The terms AA, EU, XC, XD, XE, XX are not valid Country codes for the pesticides data collection	
S.05	sampArea	E	sampArea is not within sampCountry	The 'area of sampling' reported must be The 'Area of sampling' (sampArea) must be within the 'Country of sampling' (sampCountry)	The sampling area must be within the sampling country
S.07	origArea	E	origArea is not within origCountry	The 'Area of origin of the product' (origArea) must be within the 'Country of origin of the product' (origCountry)	The area of origin must be within the country of origin
S.10	procCountry	E		The terms EU, XD, XE are not valid Country codes for the pesticides data collection	
S.11	procArea	E	procArea is not within procCountry	The 'Area of processing' (procArea) must be within the 'Country of processing' (procCountry)	The processing area must be within the processing country
S.13	prodCode	E		The MATRIX codes P1011010A, P1012010A, P1015010A, P1013010A, P1014010A, P1016010A, and P1017010A are obsolete for reporting meat	The MATRIX codes P1011010A, P1012010A, P1015010A, P1013010A, P1014010A, P1016010A, and P1017010A are obsolete for reporting meat. Please use the new codes ending with 'B' instead of 'A' for the Pesticides data collection

<sup>16</sup> The table lists the validation rules applicable to the pesticide monitoring data collection. Please note that all the validation rules will be downloadable as XML files from the EFSA Data Collection Framework (DCF, at <https://dcf.efsa.europa.eu/dcf-war/dc>). The XML files available on the DCF for the pesticide monitoring data collection are two, one with a set of rules specific for the pesticide monitoring data collection and a second one with the general BR that are common to all the EFSA SSD1 data collections. Please be aware that the XML file on the general BR in common to all the EFSA data collections contains a number of rules that are superseded by the BR specific for the pesticide monitoring data collection. New or modified rules are highlighted in **bold**.

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.14	prodText	E	prodText is missing, though prodCode is not in list	If the value in the data element 'Product code' (prodCode) is equal to 'not in list' (XXXXXXA), then a value in 'Product full text description' ('prodText') must be reported	Product text should be completed if code is 'XXXXXXA'
<b>S.14</b>	<b>prodText</b>	<b>W</b>		If 'Product code' is equal to 'P1040000A' 'Honey and other apicultural products' AND the concerned sample is not honey at such (e.g. royal jelly, pollen, etc.), then 'prodText' must be provided	
S.15	prodProdMeth	E	prodProdMeth is missing, though mandatory.	A value in the data element 'Method of production' ('prodProdMeth') must be reported	The field 'prodProdMeth' is mandatory for the data collection on pesticide residues
S.15	prodProdMeth	E		The only valid product method ('prodProdMeth') codes for the Pesticides data collections are PD07A, PD09A, PD12A or Z0215	
S.17	prodTreat	E	prodTreat is unknown.	The value in the data element 'Product treatment' ('prodTreat') must be different from 'Unknown' (T899A)	Product treatment cannot be T899A ('Unknown')
S.17	prodTreat	E	prodTreat is not processed, though prodCode is a baby food.	If the value in the data element 'Product code' (prodCode) is 'Food for infants and young children' (PX100000A), or 'Baby foods other than processed cereal-based foods' (PX100001A), or 'Processed cereal-based foods for infants and young children' (PX100003A), or 'Infant formulae' (PX100004A), or 'Follow-on formulae' (PX100005A), then the value in the data element 'Product treatment' ('prodTreat') must be equal to 'Processed' (T100A)	If a baby food prodCode is reported, the only valid treatment code is T100A
S.17	prodTreat	W	WARNING: prodTreat is not among those recommended in EFSA guidance	For pesticide monitoring data, a product treatment code (prodTreat) that is not among those recommended in the guidance triggers a warning message	EFSA recommends using the codes in <b>Table 2</b> of this document
<b>S.17</b>	<b>prodTreat</b>	<b>E</b>	prodTreat is not dehydration, churning, milk pasteurisation, freezing, concentration or unprocessed, though prodCode is milk of animal origin	If the value in the data element 'Product code' (prodCode) is 'Milk' (P1020000A), or 'Milk Cattle' (P1020010A), or 'Milk Sheep' (P1020020A), or 'Milk Goat' (P1020030A), or 'Milk Horse' (P1020040A), or 'Milk Others' (P1020990A), then the value in the data element 'Product treatment' ('prodTreat') must be equal to 'Dehydration' (T131A), or 'Churning' (T134A), or 'Milk pasteurisation' (T150A), or 'Freezing' (T998A), or 'Concentration' (T136A), or 'Unprocessed' (T999A)	If a prodCode for animal milk is reported, the only valid treatments code are T131A, T134A, T150A, <b>T152A, T153, T154A, T155A</b> or T999A

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.17	prodTreat	E	The prodCode is not milk of animal origin, though prodTreat is milk pasteurisation.	If the value in the data element 'Product treatment' (prodTreat) is 'Milk pasteurisation' (T150A), then the value in the data element 'Product code' (prodCode) must be equal to 'Milk' (P1020000A), or 'Milk Cattle' (P1020010A), or 'Milk Sheep' (P1020020A), or 'Milk Goat' (P1020030A), or 'Milk Horse' (P1020040A), or 'Milk Others' (P1020990A)	For the pesticides data collection the code 'Milk pasteurisation' (T150A) can only be used in combination with animal origin milk samples. See also <b>Table 2</b> of this document
<b>S.17</b>	<b>prodTreat</b>	E	The prodTreat code Dehydration cannot be selected for the sample tested	The 'prodTreat' code <b>T131A</b> 'Dehydration' cannot be selected for samples/prodCode belonging to the 'Pulses (dry seeds)' food group: P0300000A (Pulses (dry)), P0300010A (Beans (dry)), P0300020A (Lentils (dry)), P0300030A (Peas (dry)), P0300040A (Lupins (dry)) and P0300990A (Other pulses (dry))	See also <b>Example 3</b> of the present document
S.22	prodY	E	prodY is greater than the current year	'The value in 'Year of production' (prodY) must be less than or equal to the current year	Production year cannot be greater than the current year
S.22	prodY	E	prodY is greater than expiryY	'The value in 'Year of production' (prodY) must be less than or equal to the value in 'Year of expiry' (expiryY)	Production year cannot be greater than expiry year
S.22	prodY	E	prodY is greater than sampY.	'The value in 'Year of production' (prodY) must be less than or equal to the value in 'Year of sampling' (sampY)	Production year cannot be greater than the year of sampling
S.22	prodY	E	prodY is greater than analysisY	'The value in 'Year of production' (prodY) must be less than or equal to the value in 'Year of analysis' (analysisY)	Production year cannot be greater than the year of analysis
S.23	prodM	E	prodM is not between 1 and 12	The value in the data element 'Month of production' (prodM) must be between 1 and 12	Production month must be between 1 and 12
S.23	prodM	E	prodM is missing, though prodD is reported	'If the value in 'Day of production' (prodD) is reported, then a value in 'Month of Production' (prodM) must be reported	Production month must be completed if production day is completed
S.23	prodM	E	The combination of values in prodM and prodY is greater than the current date	The partial date of the production, reported in 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the current date	The combination of production month and production year must be less than the current month and year
S.23	prodM	E	The combination of values in prodM and prodY is greater than the combination of values in expiryM and expiryY.	The partial date of the production, reported in 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the partial date of the expiry, reported in 'Month of expiry' (expiryM), and 'Year of expiry' (expiryY)	The combination of production month and production year must be less than the expiry month and year



SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.23	prodM	E	The combination of values in prodM and prodY is greater than the combination of values in sampM and sampY	The partial date of the production, reported in 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the partial date of the sampling, reported in 'Month of sampling' (sampM), and 'Year of sampling' (sampY)	The combination of production month and production year must be less than the sample month and year
S.23	prodM	E	The combination of values in prodM and prodY is greater than the combination of values in analysisM and analysisY.	The partial date of the production, reported in 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the partial date of the analysis, reported in 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY)	The combination of production month and production year must be less than the analysis month and year
S.24	prodD	E	prodD is not between 1 and 31	The value in the data element 'Day of production' (prodD) must be between 1 and 31	Production day must be between 1 and 31
S.24	prodD	E	The combination of values in prodD, prodM and prodY is not a valid date	The date of the production, reported in 'Day of production' (prodD), 'Month of production' (prodM), and 'Year of production' (prodY), must be a valid date	The combination of production day, month and year must be a valid date
S.24	prodD	E	The date of the production, reported in prodD, prodM and prodY, is not less than or equal to the current date.	The date of the production, reported in 'Day of production' (prodD), 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the current date	The combination of production day, month and year must be less than the current date
S.24	prodD	E	The date of the production, reported in prodD, prodM and prodY, is not less than or equal to the date of the expiry, reported in expiryD expiryM and expiryY	The date of the production, reported in 'Day of production' (prodD), 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the date of the expiry, reported in 'Day of expiry' (expiryD), 'Month of expiry' (expiryM), and 'Year of expiry' (expiryY)	The combination of production day, month and year must be less than the expiry date
S.24	prodD	E	The date of the production, reported in prodD, prodM, and prodY, is not less than or equal to the date of the sampling, reported in sampD, sampM, and sampY	The date of the production, reported in 'Day of production' (prodD), 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the date of the sampling, reported in 'Day of sampling' (sampD), 'Month of sampling' (sampM), and 'Year of sampling' (sampY)	The combination of production day, month and year must be less than the sample date
S.24	prodD	E	The date of the production, reported in prodD, prodM, and prodY, is not less than or equal to the date of the analysis, reported in analysisD, analysisM, and analysisY	The date of the production, reported in 'Day of production' (prodD), 'Month of production' (prodM), and 'Year of production' (prodY), must be less than or equal to the date of the analysis, reported in 'Day of analysis' (analysisD), 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY)	The combination of production day, month and year must be less than the analysis date

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.26	expiryM	E	expiryM is not between 1 and 12	The value in the data element 'Month of expiry' (expiryM) must be between 1 and 12	Expiry month must be between 1 and 12
S.26	expiryM	E	If the value in 'Day of expiry' (expiryD) is reported, then a value in 'Month of expiry' (expiryM) must be reported	If the value in 'Day of expiry' (expiryD) is reported, then a value in 'Month of expiry' (expiryM) must be reported	Expiry month must be completed if expiry day is completed
S.27	expiryD	E	expiryD is not between 1 and 31	The value in the data element 'Day of expiry' (expiryD) must be between 1 and 31	Expiry day must be between 1 and 31
S.27	expiryD	E	The combination of values in expiryD, expiryM and expiryY is not a valid date	The date of the expiry, reported in 'Day of expiry' (expiryD), 'Month of expiry' (expiryM), and 'Year of expiry' (expiryY), must be a valid date	The combination of expiry day, month and year must be a valid date
S.28	sampY	E	sampY is greater than the current year	'The value in 'Year of sampling' (sampY) must be less than or equal to the value in 'Year of analysis' (analysisY)	Sample year cannot be greater than the current year
S.28	sampY	E	sampY is greater than analysisY	'The value in 'Year of sampling' (sampY) must be less than or equal to the value in 'Year of analysis' (analysisY)	Sample year cannot be greater than the analysis year
S.29	sampM	E	sampM is not between 1 and 12	The value in the data element 'Month of sampling' (sampM) must be between 1 and 12	Sample month must be between 1 and 12
S.29	sampM	E	The date of the sampling, reported in sampD, sampM, and sampY, is not less than or equal to the current date	The date of the sampling, reported in 'Day of sampling' (sampD), 'Month of sampling' (sampM), and 'Year of sampling' (sampY), must be less than or equal to the current date	Sample month must be completed if sample day is completed
S.29	sampM	E	sampM is missing, though sampD is reported	The partial date sampM/sampY must be less or equal to the current partial date M/Y	The combination of sample month and sample year must be less than the current month and year
S.29	sampM	E	The date of the sampling, reported in sampD, sampM, and sampY, is not less than or equal to the date of the analysis, reported in analysisD, analysisM, and analysisY	The date of the sampling, reported in 'Day of sampling' (sampD), 'Month of sampling' (sampM), and 'Year of sampling' (sampY), must be less than or equal to the date of the analysis, reported in 'Day of analysis' (analysisD), 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY)	The combination of sample month and sample year must be less than the analysis month and year
S.30	sampD	E	sampD is not between 1 and 31	The value in the data element 'Day of sampling' (sampD) must be between 1 and 31	Sample day must be between 1 and 31
S.30	sampD	E	The combination of values in sampD, sampM, and sampY is not a valid date	The date of the sampling, reported in 'Day of sampling' (sampD), 'Month of sampling' (sampM), and 'Year of sampling' (sampY), must be a valid date	The combination of sample day, month and year must be a valid date

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
S.30	sampD	E	The combination of values in sampM, and sampY is greater than the current date	The partial date of the sampling, reported in 'Month of sampling' (sampM), and 'Year of sampling' (sampY), must be less than or equal to the current date	The combination of sample day, month and year must be less than the current date
S.30	sampD	E	The combination of values in sampM and sampY is greater than the combination of values in analysisM and analysisY	The partial date of the sampling, reported in 'Month of sampling' (sampM), and 'Year of sampling' (sampY), must be less than or equal to the partial date of the analysis, reported in 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY)	The combination of sample day, month and year must be less than the analysis date
S.32	progLegalRef	E	For pesticide data collection, only the following codes can be used: N027A, N028A, N247A or N018A		See also Table 9 of the EFSA guidance for the 2014 pesticide data collection (EFSA, 2015)
S.32	progLegalRef	E	progLegalRef is not samples of food products falling under Directive 2006/125/EC or 2006/141/EC, though prodCode is a baby food	If the value in the data element 'Product code' (prodCode) is 'Food for infants and young children' (PX100000A), or 'Baby foods other than processed cereal-based foods' (PX100001A), or 'Processed cereal-based foods for infants and young children' (PX100003A), or 'Infant formulae' (PX100004A), or 'Follow-on formulae' (PX100005A), then the value in the data element 'Programme legal reference' (progLegalRef) must be 'Samples of food products falling under Directive 2006/125/EC or 2006/141/EC' (N028A)	For pesticide data collection, the progLegalRef code N028A can only be used in combination with one of the 'Baby Food' prodCodes (PX100000A, PX100001A, PX100003A, PX100004A, PX100005A). See also the EFSA guidance for the 2014 pesticide data collection (EFSA, 2015)
S.32/S.33/S.34	Combined SamplingInfo	E		For pesticides only certain combinations of codes for progType, progLegalRef and progSampStrategy are accepted	For pesticides, the only combinations of codes for progType, progLegalRef and progSampStrategy are reported in Table 8 of the EFSA guidance for the 2014 pesticide data collection (EFSA, 2015)
S.34	Combined Reg669Info	E		For samples coded with K019A as progType, a valid combination of prodCode, origCountry and prodTreat should be reported	The combinations of codes for products/country of origin/product treatment that were covered by provisions of Regulation 669/2009 are listed in Appendix C
<b>S.34</b>	<b>Combined Reg669Info</b>	E	For the food sample tested the exact string in prodText is not reported	For certain food samples taken in the framework of Regulation (EC) No 669/2009, the exact string should be reported on a mandatory basis: P0256030A (possible strings: 'Chinese celery leaves' OR 'Coriander leaves'), P0256080A (possible strings: 'Basil (holy, sweet)' OR 'Mint') or P0231020A (possible strings: 'Chili peppers' OR 'Sweet/bell peppers')	See also <b>Table 1</b> of the present document

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
669/2009 (import control)/S.35	sampMethod	E	The sampling method code (sampMethod) is not selectable for the pesticide monitoring data collection	The only valid sampling method (sampMethod) codes for the Pesticides data collections are 'N009A', 'N014A', 'N010A', 'N001A' or 'N008A'	The only valid sampling method (sampMethod) codes for the Pesticides data collections are 'N009A', 'N014A', 'N010A', 'N001A', 'N008A'
S.38	lotSizeUnit	E	lotSizeUnit is missing, though lotSize is reported	If the value in 'Lot size' (lotSize) is reported, then a value in 'Lot size unit' (lotSizeUnit) must be reported	Lot size unit must be reported when lot size is reported
L.1	labCode	E	labCode is missing, though mandatory	A value in the data element 'Laboratory' (labCode) must be reported	The field labCode is mandatory for the data collection on pesticide monitoring
L.2	labAccred	E	labAccred is not accredited or none	The value in the data element 'Laboratory accreditation' (labAccred) must be equal to 'Accredited' (L001A), or 'None' (L003A)	The only valid labAccred codes for the Pesticides data collections are L001A and L003A
L.3	labCountry	E		The terms AA, EU, XC, XD, XE, XX are not valid Country codes for the pesticides data collection	
O.2	localOrg Country	E		The terms AA, EU, XC, XD, XE, XX are not valid Country codes for the pesticides data collection	
R.02	analysisY	E	analysisY is greater than the current year	The value in 'Year of analysis' (analysisY) must be less than or equal to the current year	Analysis year cannot be greater than the current year
R.03	analysisM	E	analysisM is not between 1 and 12	The value in the data element 'Month of analysis' (analysisM) must be between 1 and 12	Analysis month must be between 1 and 12
R.03	analysisM	E	analysisM is missing, although analysisD is reported	If the value in 'Day of analysis' (analysisD) is reported, then a value in 'Month of analysis' (analysisM) must be reported	Analysis month must be completed if analysis day is completed
R.03	analysisM	E	The combination of values in analysisM and analysisY is greater than the current date	The partial date of the analysis, reported in 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY), must be less than or equal to the current date	The combination of analysis month and analysis year must not be greater than the current month and year
R.04	analysisD	E	analysisD is not between 1 and 31	The value in the data element 'Day of analysis' (analysisD) must be between 1 and 31	
R.04	analysisD	E	The combination of values in analysisD, analysisM, and analysisY is not a valid date	The date of the analysis, reported in 'Day of analysis' (analysisD), 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY), must be a valid date	The combination of analysis day, month and year must be a valid date
R.04	analysisD	E	The date of the analysis, reported in analysisD, analysisM, and analysisY, is not less than or equal to the current date	The date of the analysis, reported in 'Day of analysis' (analysisD), 'Month of analysis' (analysisM), and 'Year of analysis' (analysisY), must be less than or equal to the current date	The combination of analysis day, month and year must not be greater than the current date

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.06	paramCode	E	The combination of values in paramCode, labSampCode and labSubSampCode is not unique	If the value in the data element 'Parameter code' (paramCode) is different from 'Not in list' (RF-XXXX-XXX-XXX), then the combination of values in the data elements 'Parameter code' (paramCode), 'Laboratory sample code' (labSampCode), 'Laboratory sub-sample code' (labSubSampCode) must be unique	When parameter text not equals 'Not in list' then each paramCode should be unique for that labSampCode
R.07	paramText	E	paramText is missing, though paramCode is not in list	If the value in the data element 'Parameter code' (paramCode) is equal to 'Not in list' (RF-XXXX-XXX-XXX), then a value in 'Parameter text' (paramText) must be reported	Parameter text should be completed if code is RF-XXXX-XXX-XXX
R.08	paramType	E		The only valid Parameter Type (paramType) codes for the Pesticides data collections are P002A, P004A and P005A	
R.11	anMethText	E	anMethText is missing, though anMethCode is not in list	If the value in the data element 'Analytical method code' (anMethCode) is equal to 'Classification not possible' (F001A), then a value in 'Analytical method text' (anMethText) must be reported	Analytical method text should be completed if method code is F001A
R.12	accredProc	E		The only valid accreditation procedure for the analytical method (accredProc) codes for the Pesticides data collections are V001A, V005A and V999A	
R.12	resEvaluation	E		The only valid codes for the evaluation of results (resEvaluation) for the Pesticides data collections are J002A, J003A, J031A and J029A	
R.13	resUnit	E	resUnit is missing, though at least one numeric data element (resLOD, resLOQ, CCalpha, CCbeta, resVal, resValUncert, resValUncertSD, resLegalLimit) is reported	If a value is reported in at least one of the following data elements: 'Result LOD' (resLOD), 'Result LOQ' (resLOQ), 'CC alpha' (CCalpha), 'CC beta' (CCbeta), 'Result value' (resVal), 'Result value uncertainty' (resValUncert), 'Result value uncertainty Standard deviation' (resValUncertSD), 'Legal Limit for the result' (resLegalLimit), then a value in 'Result unit' (resUnit) must be reported	If a numeric field is reported, the unit should be reported
R.13	resUnit	E	resUnit is not reported in milligram per kilogram	The value in the data element 'Result unit' (resUnit) must be equal to 'Milligram per kilogram' (G061A)	For pesticides monitoring, only 'mg/kg' is accepted as code for resUnit

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.13	resUnit	E	resUnit is missing, though resType is not a qualitative value	If the value in the data element 'Type of result' (resType) is not equal to 'Qualitative Value (Binary)' (BIN), then a value in 'Result unit' (resUnit) must be reported	For results other than qualitative values, the result unit must be reported. If 'Type of result' is different from BIN, then 'Result unit' must be specified
<b>R.14</b>	<b>resLOD</b>	<b>E</b>	resLOD is greater than resLOQ	The value in 'Result LOD' (resLOD) must be less than or equal to the value in 'Result LOQ' (resLOQ)	Not mandatory information, but recommended if the information is available
<b>R.14</b>	<b>resLOD</b>	<b>E</b>	The value in 'Result LOD' (resLOD) must be greater than 0	resLOD is less than or equal to 0	Not mandatory information, but recommended if the information is available
<b>R.14</b>	<b>resLOD</b>	<b>E</b>	resLOD is missing, though resType is LOD	If the value in the data element 'Type of result' (resType) is equal to 'Non Detected Value (below LOD)' (LOD), then a value in 'Result LOD' (resLOD) must be reported	Not mandatory information, but recommended if the information is available
R.15	resLOQ	E	resLOQ is missing, though resType is not quantified value	'If the value in the data element 'Type of result' (resType) is equal to 'Non Quantified Value (below LOQ)' (LOQ), then a value in 'Result LOQ' (resLOQ) must be reported	The result LOQ must be completed if the result type is LOQ
R.15	resLOQ	E	resLOQ is missing, though mandatory	A value in the data element 'Result LOQ' (resLOQ) must be reported	The field resLOQ is mandatory for the data collection on pesticides residues
R.15	resLOQ	E	resLOQ is less than or equal to 0	The value in 'Result LOQ' (resLOQ) must be greater than 0	If the LOQ is reported, it should be greater than 0
R.18	resVal	E	resVal is missing, though resType is numerical value	If the value in the data element 'Type of result' (resType) is equal to 'Numerical Value' (VAL), then a value in 'Result value' (resVal) must be reported	The result value must be completed if the result type is VAL
R.18	resVal	E	resVal is less than or equal to 0.	The value in 'Result value' (resVal) must be greater than 0	If the result value is reported, it should be greater than 0
R.19	resValRec	E	resValRec is less than or equal to 0	The value in 'Result value recovery' (resValRec) must be greater than 0	If result value recovery is reported, it should be greater than 0.
R.21	resValUncertSD	E	resValUncertSD is less than or equal to 0	The value in 'Result value uncertainty Standard deviation' (resValUncertSD) must be greater than 0	If result value uncertainty standard deviation is reported, it should be greater than 0
R.22	resValUncert	E	resValUncert is less than or equal to 0	The value in 'Result value uncertainty' (resValUncert) must be greater than 0	If result value uncertainty is reported, it should be greater than 0
R.23	moistPerc	E	moistPerc is not between 0 and 100	The value in the data element 'Percentage of moisture in the original sample' (moistPerc) must be between 0 and 100	The percentage moisture should be between 0 and 100
R.24	fatPerc	E	fatPerc is not between 0 and 100	The value in the data element 'Percentage of fat in the original sample' (fatPerc) must be between 0 and 100	The percentage fat should be between 0 and 100

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.25	exprRes	E	The selectable exprRes codes can only be B001A, B003A and B007A	For the pesticide data collection, only 3 codes are selectable as expression of result (exprRes): Whole weight (code B001A) or Fat basis (code B003A) or Reconstituted sample (B007A)	For the pesticide data collection, the data element cannot be left blank in case the results are reported on fat basis
R.25/R.24	exprRes/fatPerc	E	fatPerc is missing, though exprRes is fat weight	If the value in the data element 'Expression of result' (exprRes) is equal to 'fat weight' (B003A), then a value in 'Percentage of fat in the original sample' (fatPerc) must be reported	For the pesticide data collection, the results can be expressed as 'reconstituted sample' (B007A) for the 'baby food' samples only
R.25	exprRes	W	WARNING: prodCode is not a baby food, though exprRes is reconstituted product	If the value in the data element 'Expression of result' (exprRes) is 'Reconstituted product' (B007A), then the value in the data element 'Product code' (prodCode) should be 'Food for infants and young children' (PX100000A), or 'Baby foods other than processed cereal-based foods' (PX100001A), or 'Processed cereal-based foods for infants and young children' (PX100003A), or 'Infant formulae' (PX100004A), or 'Follow-on formulae' (PX100005A)	
R.25	exprRes	E	prodCode is not milk of animal origin or egg samples, though exprRes is fat weight	If the value in the data element 'Expression of result' (exprRes) is 'Fat weight' (B003A), then the value in the data element 'Product code' (prodCode) must be 'Milk' (P1020000A), or 'Milk Cattle' (P1020010A), or 'Milk Sheep' (P1020020A), or 'Milk Goat' (P1020030A), or 'Milk Horse' (P1020040A), or 'Milk Others' (P1020990A), or 'Bird eggs' (P1030000A), or 'Eggs Chicken' (P1030010A), or 'Eggs Duck' (P1030020A), or 'Eggs Goose' (P1030030A), or 'Eggs Quail' (P1030040A), or 'Eggs Others' (P1030990A)	The exprRes code B003A can be only reported in combination with samples of milk of animal origin (P1020000A, P1020010A, P1020020A, P1020030A, P1020040, and P1020990A) or for egg samples (P1030000A, P1030010A, P1030020A, P1030030A, P1030040A, P1030990A). See also section 5.19 of the 2014 EFSA guidance document EFSA (2015)
R.24	fatPerc	W	WARNING: fat percentage in milk of animal origin on whole weight basis is not reported; EFSA will assume a fat content equal to 4%	If the value in the data element 'Product code' (prodCode) is 'Milk' (P1020000A), or 'Milk Cattle' (P1020010A), or 'Milk Sheep' (P1020020A), or 'Milk Goat' (P1020030A), or 'Milk Horse' (P1020040A), or 'Milk Others' (P1020990A), and the value in the data element 'Expression of result' (exprRes) is 'Whole weight' (B001A), and the value in 'Percentage of fat in the original sample' (fatPerc) is not reported, then EFSA will assume a fat content equal to 4%	If results on milk samples (P1020000A, P1020010A, P1020020A, P1020030A, P1020040, P1020990A) are reported in combination with exprRes=B001A (whole weight basis) AND if the fatPerc is not reported, EFSA will assume a fat content equal to 4%

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.24	fatPerc	W	WARNING: fat percentage in egg samples on whole weight basis is not reported; EFSA will assume a fat content equal to 10%	If the value in the data element 'Product code' (prodCode) is 'Bird eggs' (P1030000A), or 'Eggs Chicken' (P1030010A), or 'Eggs Duck' (P1030020A), or 'Eggs Goose' (P1030030A), or 'Eggs Quail' (P1030040A), or 'Eggs Others' (P1030990A), and the value in the data element 'Expression of result' (exprRes) is 'Whole weight' (B001A), and the value in 'Percentage of fat in the original sample' (fatPerc) is not reported, then EFSA will assume a fat content equal to 10%	If results on egg samples (P1030000A, P1030010A, P1030020A, P1030030A, P1030040A, P1030990A) are reported in combination with exprRes= B001A (whole weight basis) AND if the fatPerc is not reported, EFSA will assume a fat content equal to 10%
<b>R.27</b>	<b>resType</b>	<b>E</b>	Only LOQ, LOD or VAL or BIN can be reported	For the pesticide data collection, only these <b>four</b> options are valid	
R.27	resType	E	resType is different from VAL, though resEvaluation is 'greater than maximum permissible quantities' or 'compliant due to measurement uncertainty'	If the value in the data element 'Evaluation of the result' (resEvaluation) is equal to 'greater than maximum permissible quantities' (J003A), or 'Compliant due to measurement uncertainty' (J031A), then the value in 'Type of result' (resType) must be equal to 'VAL'	If the result is not compliant with the legal limit, then the result must be numeric (resType=VAL)
R.29	ResLegalLimit Type	W	WARNING: resLegalLimitType is missing, though resLegalLimit is reported	If the value in 'Legal Limit for the result' (resLegalLimit) is reported, then a value in 'Type of legal limit' (resLegalLimitType) should be reported	The type of legal limit must be indicated in the legal limit type
R.29	ResLegalLimit Type	W	WARNING: resLegalLimitType is different from MRL and national or local limit	The value in the data element 'Type of legal limit' (resLegalLimitType) should be equal to 'Maximum Residue Level (MRL)' (W002A), or 'National or local limit'	Only EU MRL or national/local limits should be reported in the resLegalLimitType
R.30	resVal	E	resVal is less than resLegalLimit, though resEvaluation is 'greater than maximum permissible quantities', or 'compliant due to measurement uncertainty'	If the value in the data element 'Evaluation of the result' (resEvaluation) is equal to 'greater than maximum permissible quantities' (J003A), or 'Compliant due to measurement uncertainty' (J031A), then the value in 'Result value' (resVal) must be greater than 'Legal Limit for the result' (resLegalLimit)	Where resEvaluation is either J003A or J031A, then resVal must be greater than resLegalLimit
R.30	resVal	E	resEvaluation is less than or equal to maximum permissible quantities, though resVal is greater than resLegalLimit	If the value in 'Result value' (resVal) is greater than the value in 'Legal Limit for the result' (resLegalLimit), then the value in 'Evaluation of the result' (resEvaluation) must be different from 'less than or equal to maximum permissible quantities' (J002A)	



SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.30	resEvaluation	E	resEvaluation is missing, though mandatory	A value in the data element 'Evaluation of the result' (resEvaluation) must be reported	The field resEvaluation is mandatory for the data collection on pesticide residues
R.31	actTakenCode	W	WARNING: actTakenCode is missing, though resEvaluation is greater than maximum permissible quantities (non compliant result)	If the value in the data element 'Evaluation of the result' (resEvaluation) is equal to 'greater than maximum permissible quantities' (J003A), then a value in 'Action Taken' (actTakenCode) should be reported	For not compliant results, the action taken code should be completed
MatrixTool validation					
<b>R.06/S.13</b>	<b>paramCode/ prodCode</b>	E	The selected paramCode is not valid for animal products. Please correct the paramCode (see e.g. RF-0422-001-PPP and verify paramType, if appropriate)		
R.06	paramCode	E	The selected paramCode is not valid for the food product analysed. Please correct the record		
R.06/S.13	paramCode/ prodCode	E	The prodCode and/or paramCode are not valid. Please correct the record		
R.08	paramType	E	The prodCode/paramCode combination is compliant with Table A, but the paramType is wrong. Please correct the record		
R.08	paramType	E	The prodCode/paramCode combination is compliant with TableBabyFood, but the paramType is wrong. Please correct the paramType		
R.06	paramCode	E	The selected paramCode does not refer to the correct RD for the product analysed. Please correct the paramCode (see TableA) and verify or change paramType to P002A, if appropriate (see TableB)		

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.08	paramType	W	The prodCode/paramCode combination is compliant with TableBabyFood, but the paramType may be wrong. Please correct or verify the paramType selected, as appropriate		
R.08	paramType	W	The prodCode/paramCode is compliant with Table A, but the paramType may be wrong. Please correct or verify the paramType selected, as appropriate		
R.08	paramType	W	This record is compliant with TableB. Thus, it is considered as complementary result and will not be used for further data analysis in the frame of the preparation of the EU Annual Report, except in exceptional ad hoc cases		
R.08	paramType	W	This record concerning Baby Food is compliant with TableB. Thus, it is considered as complementary result and will not be used for further data analysis in the frame of the preparation of the EU Annual Report, except in exceptional ad hoc cases		
S.13	prodCode	W	Food product reported as 'Not in list'. For this record the MatrixTool validation was not performed, as not possible		

SSD element code	SSD element name(s)	Data check output type <sup>(a)</sup>	Error message returned in case of check rule violation	Rule description	Note
R.06	paramCode	W	Substance analysed has been reported as 'Not in list'. For this record the MatrixTool validation was not performed, as not possible		
S.13/R.06	prodCode/ paramCode	W	Both food product and substance reported as 'Not in list'. For this record, the MatrixTool validation was not performed, as not possible		
R.06	paramCode	W	Please note that this record will not be used for the preparation of the EU Annual Report		

(a): Types of output of the data validation: E = Error, W = Warning.

## Appendix E – Questions and answers on SSD coding

### Example 8 : How to report the results for baby food?

SSD data element	Element value	Code description	Comment
prodCode	PX100004A	Infant formulae	
prodText	'Reconstituted infant formula based on cow's milk; result reported for diluted product prepared as recommended on product label (50 g product diluted with 100 mL water)'		The data element 'prodText' should always be used to provide more detailed descriptions of the product analysed, especially for the composite/processed food samples
prodProdMeth	PD07A	Organic production	To report if the product analysed was marketed as organic product or food of conventional farming
prodTreat	T100A	Processed	By definition baby food products are processed products. More details on the type of processed product should be reported in the field 'prodText'
sampY	2016		Mandatory information
sampM	10		Although the reporting of the sampling month is not mandatory, EFSA strongly recommends reporting it in order to check the MRL applicable at the time of sampling
sampD	27		Although the reporting of the sampling day is not mandatory, EFSA strongly recommends reporting it in order to check the MRL applicable at the time of sampling
progLegalRef	N028A	Commission Directive (EC) No 125/2006 and 2006/141/EC	Samples of 'baby food' products, which are covered by Directives 2006/125/EC and 2006/141/EC and their amendments
progSampStrategy	ST020A	Selective sampling	For baby food samples taken in the framework of the EU-coordinated programme, the appropriate codes are ST10A or ST20A; for national programmes any code can be selected
progType	K005A	Official (National) programme	
sampMethod	N009A	Directive 2002/63/EC - Community methods of sampling for the official control of pesticide residues	The code N014A (official control of feed) would not be an appropriate 'sampMethod' code for this example
sampPoint	E500A	Distribution: wholesale and retail sale	No specific provisions/restrictions
analysisY	2016		
paramCode	RF-0012-001-PPP	Acephate	The European Commission clarified in the Standing Committee of the Food Chain and Animal Health that pending the adoption of the new delegated acts the residues of pesticides in baby food samples shall be analysed according to the legal residue definitions set out in

SSD data element	Element value	Code description	Comment
			<p>Regulation (EC) No 396/2005 and not according to the baby food Directives. This approach applies to both the national and EU-wide control programmes. In the MatrixTool, a complete list of valid paramCodes for baby food can be found</p> <p>For pesticides with different residue definitions set for different food products, the residue definition set under Regulation (EC) No 396/2005 for the main ingredient should be selected. Thus, for baby food that mainly comprises fruit or vegetables, the paramCode applicable for fruit and vegetables should be selected. Infant formulae and follow on formulae on milk basis should be analysed for the residue definition set for milk. Similarly, for baby food containing mainly animal products other than milk, the residue definition for animal products should be selected</p>
paramType	P005A	Full legal residue definition analysed	<p>The valid 'paramType' for the specific 'paramCode' can be found also in the MatrixTool</p> <p>In addition, reporting countries can report the components of complex residue definitions using P002A</p>
resUnit	G061A	mg/kg	This is the only code acceptable for pesticide data submission
resLOQ	0.001		<p>The LOQ has to be reported. The analytical method needs to be sufficiently sensitive to allow the quantification of the residues in accordance with the legal residue definition and the MRL, which is in most cases 0.01 mg/kg for baby food; a lower LOQ would be required for the following residue definitions - paramCodes:</p> <p>Disulfoton (RD) – RF-0149-001-PPP          Fensulfothion – RF-0685-002-PPP          Fentin (RD) – RF-0687-001-PPP          Haloxyfop (RD) – RF-0235-001-PPP or RF-0235-005-PPP          Heptachlor (RD) – RF-0236-001-PPP          Hexachlorobenzene – RF-0237-001-PPP          Nitrofen – RF-0311-001-PPP          Dimethoate/omethoate (RD) – RF-0139-001-PPP          Terbufos – RF-0412-002-PPP          Dieldrin (RD) – RF-0021-001-PPP          Endrin – RF-0156-001-PPP          Cadusafos – RF-0528-001-PPP          Demeton-S-methyl – RF-0594-002-PP          Oxydemeton-methyl (RD) – RF-0323-001-PPP          Ethoprophos – RF-0164-001-PPP          Fipronil (RD) – RF-0192-001-PPP          Propineb - RF-0359-001-PPP</p>

SSD data element	Element value	Code description	Comment
resLOD	0.0005		In addition to the mandatory reporting of the 'resLOQ', EFSA recommends to report also the 'resLOD', if available
resVal	0.005		Result of the analysis (if residue was > LOQ); the result should be reported for the product ready for consumption or the reconstituted product (diluted according to the instructions of the manufacturer)
exprRes	B007A	Reconstituted product	
resType	VAL		Residue quantified above the LOQ
resLegalLimit	0.01		For baby food, the default MRL of 0.01 mg/kg is applicable unless lower limits have been set under the relevant legislation (see paramCodes in this table). It is noted that according to Article 7(4) of Directive 2006/125/EC (and its amendments) the legal limits apply to the product ready for consumption or the product reconstituted according to the instructions of the manufacturer. A similar provision is established in Directive 2006/141/EC (Article 10)
resLegalLimitType	W002A	Maximum residue level (MRL)	
resEvaluation	J002A	≤ maximum permissible quantities	
actTakenCode	A\$P\$S	Administrative consequences\$Follow-up action due to a pesticide residue detected in organic samples, violating the provisions laid down in the organic farming legislation\$Lot recalled from the market	For this data element more than one code can be selected, if appropriate, using the '\$' separator
resComm	'Even though the sample was compliant with the MRL, the sample infringed the organic farming legislation; therefore, the sample's lot was withdrawn from the market'		Free text data element

## Annex A – Template for the 2016 National Summary Report

The purpose of the National Summary Report is to provide additional, complementary information in support of the national data and information already provided in the XML file in line with the SSD data model, such as information that is not held by laboratories compiling the XML file (e.g. the possible reasons and the actions taken in case of samples non-compliant with the EU MRL).

This document should report information concerning sample of both plant and animal origin. If different national bodies are responsible for pesticide residue control in the two sample matrices, it is the responsibility of the national competent authorities to co-ordinate at national level the collection and compilation of the information to be reported in this document.

An electronic copy containing further details on the information that should be reported is available on the EFSA Document Management System (DMS). Please return to EFSA only the Word version of the duly complete document. The Word-document template is available in the EFSA platform at: <https://dms.efsa.europa.eu/otcs/cs.exe/link/14685958>

# PESTICIDE RESIDUE CONTROL RESULTS

## NATIONAL SUMMARY REPORT

Year: 2016

Country:

1. COUNTRY
- 1.1. NAME OF THE NATIONAL COMPETENT AUTHORITY/ORGANISATION (INCL. FUNCTIONAL MAILBOX AND WEB ADDRESS WHERE NATIONAL PESTICIDE REPORTS ARE PUBLISHED)
2. OBJECTIVE AND DESIGN OF THE NATIONAL CONTROL PROGRAMME
2. KEY FINDINGS, INTERPRETATION OF THE RESULTS AND COMPARABILITY WITH THE PREVIOUS YEAR RESULTS
3. NON-COMPLIANT SAMPLES: POSSIBLE REASONS, ARfD EXCEEDANCES AND ACTIONS TAKEN
4. QUALITY ASSURANCE
5. PROCESSING FACTORS (PF)
6. ADDITIONAL INFORMATION
7. NOTE ON CONFIDENTIALITY OF CERTAIN CONTROL DATA SUBMITTED BY REPORTING COUNTRY