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## **Reporting data on pesticide residues in food and feed according to Regulation (EC) No 396/2005 (2014 data collection)**

**European Food Safety Authority**

### **Abstract**

According to Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin Member States have to monitor pesticide residue levels in food commodities and submit the monitoring results to EFSA and the European Commission. Since 2009 the Standard Sample Description (SSD) is the data model used for the reporting of data on analytical measurements of chemical substances occurring in food, feed and water. This document should provide Member States with specific guidance on how to use the SSD for the reporting of the national results of the pesticide residue monitoring in the framework of Article 32 of Regulation (EC) No 396/2005. In particular, this document describes the codes to be used for the SSD data elements which pertain to the data collection on pesticide residues monitoring of the calendar year 2014.

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**Keywords:** pesticide residues, food, monitoring, control, data collection, data model, SSD

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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 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.

This guidance document describes the individual data elements relevant for coding of pesticide residue data, including information on the data element name, valid element values and the controlled terminology (catalogues) to be used for coding of certain data elements of pesticide residue results generated for samples taken during the calendar year 2014.

The present guideline is an update of the previous guidance document drafted for the 2013 data collection (EFSA, 2014a), taking into account new legislation affecting pesticide monitoring and experiences from previous reporting years, in particular where problems with inconsistent coding were identified or where the information provided did not allow to perform the analysis as required in Article 32 of Regulation (EC) no 396/2005. The main changes compared to the previous version of the guidance document refer to the following data elements:

- Product code (prodCode): implementation of Regulation (EU) No 212/2013, requiring the introduction of new codes in the MATRIX catalogue for food of animal origin (muscle);
- Product text (prodText): all information describing the nature of the product analysed that cannot be reported with the data elements prodCode and prodTreat should be reported in the data element prodText. The data element prodComment should not be used for this purpose.
- Product treatment (prodTreat): provision of clear guidance which codes to be used to describe processed products;
- Programme legal reference (progLegalRef): introduction of new specific codes;
- Percentage of the fat in the original sample (fatPerc): provision of guidance for the reporting of the results on samples based on animal milk;
- Expression of the result (exprRes): restriction to one code to be used for coding of this data element;
- Parameter type (paramType): introduction of a new code and deprecations of two codes used previously;
- Result type (resType): a new code was introduced to report results derived with screening methods;
- Type of legal limit (resLegalLimitType): two codes are now recommended to be used;
- Business and validation rules: extension of automatized control upon data transmission.

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## 1. Introduction

### 1.1. Background

According to Regulation (EC) No 396/2005<sup>1</sup> on maximum residue levels 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 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 reports shall provide the following information:

- An analysis of the results of the controls on pesticide residues provided by EU Member States and 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. 23 data elements are mandatory for the pesticide residue data transmission; for 4 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. In addition to the mandatory data elements, optional data elements can be used to describe additional details related to the samples or the analytical results; also for these data elements consistent coding is desirable, but since this information is currently not used for the data analysis, the coding conventions are less rigorous.

EFSA launched a Member State consultation on the draft guidance document. Comments were submitted by Denmark, Spain, Cyprus, Belgium, Luxemburg, Poland, the Netherlands and Italy; these comments have been taken into account in the final version of the document as appropriate.

### 1.2. Terms of Reference

EFSA shall update the guidance document prepared for the 2013 data collection (EFSA, 2014) describing the use of the SSD for coding the results of official controls performed in 2014 by Member States in accordance with the provisions of Article 29 and 30 of Regulation (EC) No 396/2005.

The update shall in particular provide instructions for reporting information on mandatory data elements relevant for pesticide residue data. It should explain in detail the valid values to be used for coding. The new legislation having an impact on the control of pesticide residues in food shall be taken into account in this revised version of the guidance document. In addition, the document shall provide unambiguous guidance for data elements where problems with inconsistent coding were identified in the past or where the information provided by Member States did not allow performing the analysis as required in Article 32 of Regulation (EC) No 396/2005. In the revised version of the

<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, 23.5.96, p. 1-23.

guidance document particular attention should be paid to the needs of reporting countries that have to provide data to EFSA for different food domains.

## 2. Data model for pesticide residue data

The SSD defines in total 76 data elements which are characterised by an element code, an element name and an element label. For each element a specific format is defined, such as text fields with a permitted number of characters (e.g. xs.string (20) for text field with 20 characters) or numerical fields (e.g. xs.decimal 4,0 for a numerical field with 4 digits and no digits after the comma or xs.double<sup>3</sup>). The following data elements of the SSD are numerical and typically reported with decimal figures: resLOD, resLOQ, resVal, resValRec, resValUncertSD, resValUncert, moistPerc, fatPerc and resLegalLimit. Considering that in XML language the comma (",") cannot be used as a decimal separator, the results for the mentioned data elements have to be formatted with a dot (".") as decimal separator.

In Table 1 the 76 data elements of the SSD data model are listed, including the element names, codes and labels. For a number of data elements controlled terminology has been developed, i.e. a list of terms that can be used for reporting the values of the data element. These lists of controlled terminology<sup>4</sup> are also referred to as 'catalogues' or 'dictionaries' or 'pick lists'. In the last column of Table 1 the relevance of the data elements for coding of pesticide residue data is reported (mandatory or optional data elements). A number of data elements become mandatory if a certain entry is selected for another data element (mandatory only under certain conditions). The Excel file which contains the updated controlled terminologies and the corresponding codes relevant for the reference period 2014 is published together with this guidance document. It should be noted that in the SSD catalogues some codes are no longer selectable because they have been deprecated. The expiry date of the latter codes is reported in the catalogues in the column named "validTo".

In total 23 data elements are mandatory for pesticide residue data; the remaining data elements are optional, meaning that they can be used to describe certain features of the samples or of the results, but this information is currently not used for the data analysis performed by EFSA. For 16 mandatory data elements the controlled terminology catalogues have to be used for coding. In addition, catalogues are available for a number of optional data elements. It is noted that as a general rule when an entry from a catalogue is selected, only the code is required. Any further descriptions reported in additional columns of the catalogue are not required.

In general for each data element only one element value can be reported with the exception of the data element Action Taken (R.31) where multiple element values can be selected from the catalogue ACTION.

The individual data elements reported in Table 1 can be clustered in

- 1) information describing the sample and the sampling procedure,
- 2) information on the laboratory that generated the analytical result,
- 3) information describing the analytical method/analytical results and
- 4) the result evaluation.

In Sections 3 to 6 detailed instructions are provided on the selection of the correct codes for these four groups of data elements. All mandatory data elements and some selected optional data elements are described. Section 7 provides additional information and examples for cases that are not fully covered by Regulation (EC) No 396/2005 such as the reporting of the analytical results for baby food, feed, fish and results for veterinary medicinal products, safeners and synergists.

In order to make the document a useful reference for the daily work of data managers or experts working in the official control laboratories in national competent authorities responsible for the reporting of results to EFSA, the document contains cross-references and hyperlinks to related data elements which should facilitate to find relevant information in the document.

<sup>3</sup> Numeric data type where the number of digits is not specified.

<sup>4</sup> In the SSD data model, the names of controlled terminology lists/catalogues are spelled in capital letters, while the names of data elements start with lower case letters.

EFSA developed a number of business and validation rules for checking compliance of the data coding with the rules described in this guidance document. In case a non-valid value is selected for coding of a certain data element, the business rules would generate an error message requesting the data provider to correct the value or a warning message. If the data transmitter confirms the value which generated a warning, the data will be accepted in the EFSA data depository. The description of the business rules applicable to the pesticide residue data collection are described in Appendix C – Business and validation rules for pesticides monitoring.

It should be noted that EFSA has developed a new version of the SSD (Standard Sample Description\_ver. 2.0 or SSD2). While the first version of SSD was developed for reporting occurrence data of chemicals in food, SSD2 was intended to integrate also the reporting of other food domains such as to monitoring of zoonoses, zoonotic agents and antimicrobial resistance and results on environmental samples<sup>5</sup>. However, for pesticides the original version of the SSD data model is still used since the testing of SSD2 for pesticide residue data reporting is not yet completed.

This guidance document will replace some provisions of the EFSA Guidance Document “Standard sample description for food and feed” (EFSA, 2010) in order to solve problems for data reporting and/or data analysis as this guidance document is no longer updated.

The current document is complementary to the Guidance on the data exchange (EFSA, 2014b) which is dealing with technical details regarding the data submission.

In its capacity of a European Union agency, EFSA is subject to Regulation (EC) No 1049/2001<sup>6</sup> on public access to documents. Article 4 of this Regulation provides exhaustively the exceptions to public disclosure, including the protection of commercial interests and intellectual property rights. According to constant jurisprudence of the European Courts, these exceptions to public disclosure shall be interpreted strictly. In this perspective, the data provider shall be aware that data sets submitted to EFSA may be subject of such requests for public access by third parties, which may result in their full or partial disclosure. EFSA recommends that before data sets are submitted, the data provider considers whether these may contain any commercially sensitive information.

Finally, considering that the data submitted in the framework of the pesticide monitoring will be transferred to the EFSA data warehouse, the rules on data sharing should be born in mind (EFSA, 2015a).

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<sup>5</sup> A pilot project is on-going where the SSD2 data model is tested regarding its suitability for reporting results in the framework of the pesticide residue data collection.

<sup>6</sup> Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents. OJ L 145, 31.5.2001, p. 43-48.



**Table 1:** Overview of the SSD data elements

| Element code | Element name     | Element label   | Data type         | Controlled terminology | Relevance for pesticide residue data <sup>(a)</sup> |
|--------------|------------------|---|-------------------|------------------------|---|
| <b>S.01</b>  | labSampCode      | Laboratory sample code                                      | xs:string (20)    |                        | Mandatory   |
| <b>S.02</b>  | labSubSampCode   | Laboratory sub-sample code                                  | xs:decimal (4,0)  |                        |   |
| <b>S.03</b>  | lang             | Language  | xs:string (2)     | LANG                   | Mandatory   |
| <b>S.04</b>  | sampCountry      | Country of sampling   | xs:string (2)     | COUNTRY                | Mandatory   |
| <b>S.05</b>  | sampArea         | Area of sampling  | xs:string(5)      | NUTS                   |   |
| <b>S.06</b>  | origCountry      | Country of origin of the product                            | xs:string (2)     | COUNTRY                | Mandatory   |
| <b>S.07</b>  | origArea         | Area of origin of the product                               | xs:string (5)     | NUTS                   |   |
| <b>S.08</b>  | origFishAreaCode | Area of origin for fisheries or aquaculture activities code | xs:string (10)    | FAREA                  |   |
| <b>S.09</b>  | origFishAreaText | Area of origin for fisheries or aquaculture activities text | xs:string (250)   |                        |   |
| <b>S.10</b>  | procCountry      | Country of processing                                       | xs:string (2)     | COUNTRY                |   |
| <b>S.11</b>  | procArea         | Area of processing  | xs:string (5)     | NUTS                   |   |
| <b>S.12</b>  | EFSAProdCode     | EFSA Product Code   | xs:string (250)   | FOODEX                 |   |
| <b>S.13</b>  | prodCode         | Product code  | xs:string (20)    | MATRIX                 | Mandatory   |
| <b>S.14</b>  | prodText         | Product full text description                               | xs:string (250)   |                        | Mandatory (only under certain conditions)           |
| <b>S.15</b>  | prodProdMeth     | Method of production  | xs:string (5)     | PRODMD                 | Mandatory   |
| <b>S.16</b>  | prodPack         | Packaging   | xs:string (5)     | PRODPAC                |   |
| <b>S.17</b>  | prodTreat        | Product treatment   | xs:string(5)      | PRODTR                 | Mandatory   |
| <b>S.18</b>  | prodBrandName    | Brand name  | xs:string(250)    |                        |   |
| <b>S.19</b>  | prodManuf        | Manufacturer  | xs:string (250)   |                        |   |
| <b>S.20</b>  | prodIngred       | Ingredients   | xs:string(250)    |                        |   |
| <b>S.21</b>  | prodCom          | Product comment   | xs:string (250)   |                        |   |
| <b>S.22</b>  | prodY            | Year of production  | xs:decimal (4,0)  |                        |   |
| <b>S.23</b>  | prodM            | Month of production   | xs:decimal(2,0)   |                        |   |
| <b>S.24</b>  | prodD            | Day of production   | xs:decimal (2,0)  |                        |   |
| <b>S.25</b>  | expiryY          | Year of expiry  | xs:decimal (4,0)  |                        |   |
| <b>S.26</b>  | expiryM          | Month of expiry   | xs:decimal(2,0)   |                        |   |
| <b>S.27</b>  | expiryD          | Day of expiry   | xs:decimal (2,0)  |                        |   |
| <b>S.28</b>  | sampY            | Year of sampling  | xs:decimal (4, 0) |                        | Mandatory   |
| <b>S.29</b>  | sampM            | Month of sampling   | xs:decimal (2, 0) |                        |   |
| <b>S.30</b>  | sampD            | Day of sampling   | xs:decimal (2, 0) |                        |   |
| <b>S.31</b>  | progCode         | Sampling programme code                                     | xs:string (20)    |                        |   |
| <b>S.32</b>  | progLegalRef     | Programme legal reference                                   | xs.string (100)   |                        | Mandatory   |
| <b>S.33</b>  | progSampStrategy | Sampling strategy   | xs:string (5)     | SAMPSTR                | Mandatory   |
| <b>S.34</b>  | progType         | Type of sampling program                                    | xs:string (5)     | SRCTYP                 | Mandatory   |

| Element code | Element name    | Element label                                     | Data type         | Controlled terminology | Relevance for pesticide residue data <sup>(a)</sup> |
|--------------|-----------------|---|-------------------|------------------------|---|
| <b>S.35</b>  | sampMethod      | Sampling method                                   | xs:string (5)     | SAMPMD                 | Mandatory   |
| <b>S.36</b>  | sampleNum       | Number of samples                                 | xs:integer        |                        |   |
| <b>S.37</b>  | lotSize         | Lot size  | xs:double         |                        |   |
| <b>S.38</b>  | lotSizeUnit     | Lot size unit                                     | xs:string (5)     | UNIT                   |   |
| <b>S.39</b>  | sampPoint       | Sampling point                                    | xs:string (10)    | SMPNT                  | Mandatory   |
| <b>L.1</b>   | labCode         | Laboratory  | xs:string (100)   |                        | Mandatory   |
| <b>L.2</b>   | labAccred       | Laboratory accreditation                          | xs:string (5)     | LABACC                 | Mandatory   |
| <b>L.3</b>   | labCountry      | Laboratory country                                | xs:string (2)     | COUNTRY                |   |
| <b>O.1</b>   | localOrg        | Local organisation                                | xs:string (100)   |                        |   |
| <b>O.2</b>   | localOrgCountry | Local organisation country                        | xs:string (2)     | COUNTRY                |   |
| <b>R.01</b>  | resultCode      | Result code                                       | xs:string (40)    |                        | Mandatory   |
| <b>R.02</b>  | analysisY       | Year of analysis                                  | xs:decimal (4, 0) |                        | Mandatory   |
| <b>R.03</b>  | analysisM       | Month of analysis                                 | xs:decimal (2, 0) |                        |   |
| <b>R.04</b>  | analysisD       | Day of analysis                                   | xs:decimal (2, 0) |                        |   |
| <b>R.05</b>  | EFSAParamCode   | EFSA Parameter Code                               | xs:string (250)   | To be defined          |   |
| <b>R.06</b>  | paramCode       | Parameter code                                    | xs:string (20)    | PARAM                  | Mandatory   |
| <b>R.07</b>  | paramText       | Parameter text                                    | xs:string (250)   |                        | Mandatory (only under certain conditions)           |
| <b>R.08</b>  | paramType       | Type of parameter                                 | xs:string (5)     | PARTYP                 | Mandatory   |
| <b>R.09</b>  | anMethRefCode   | Analytical method reference code                  | xs:string(500)    |                        |   |
| <b>R.10</b>  | anMethCode      | Analytical method code                            | xs:string (5)     | ANLYMD                 |   |
| <b>R.11</b>  | anMethText      | Analytical method text                            | xs:string (250)   |                        | Mandatory (only under certain conditions)           |
| <b>R.12</b>  | accredProc      | Accreditation procedure for the analytical method | xs:string (5)     | MDSTAT                 |   |
| <b>R.13</b>  | resUnit         | Result unit                                       | xs:string (5)     | UNIT                   | Mandatory   |
| <b>R.14</b>  | resLOD          | Result LOD  | xs:double         |                        |   |
| <b>R.15</b>  | resLOQ          | Result LOQ  | xs:double         |                        | Mandatory   |
| <b>R.16</b>  | CCalpha         | CC alpha  | xs:double         |                        |   |
| <b>R.17</b>  | CCbeta          | CC beta   | xs:double         |                        |   |
| <b>R.18</b>  | resVal          | Result value                                      | xs:double         |                        | Mandatory (only under certain conditions)           |
| <b>R.19</b>  | resValRec       | Result value recovery                             | xs:double         |                        | Mandatory (only under certain conditions)           |
| <b>R.20</b>  | resValRecCorr   | Result value corrected for recovery               | xs:string (1)     | YESNO                  |   |
| <b>R.21</b>  | resValUncertSD  | Result value uncertainty Standard deviation       | xs:double         |                        |   |
| <b>R.22</b>  | resValUncert    | Result value uncertainty                          | xs:double         |                        |   |
| <b>R.23</b>  | moistPerc       | Percentage of moisture in the original sample     | xs:double         |                        |   |

| Element code | Element name      | Element label                            | Data type       | Controlled terminology | Relevance for pesticide residue data <sup>(a)</sup> |
|--------------|-------------------|--|-----------------|------------------------|---|
| R.24         | fatPerc           | Percentage of fat in the original sample | xs:double       |                        |   |
| R.25         | exprRes           | Expression of result                     | xs:string (5)   | EXRES                  |   |
| R.26         | resQualValue      | Result qualitative value                 | xs:string (3)   | POSNEG                 |   |
| R.27         | resType           | Type of result                           | xs:string (3)   | VALTYP                 | Mandatory   |
| R.28         | resLegalLimit     | Legal Limit for the result               | xs:double       |                        |   |
| R.29         | resLegalLimitType | Type of legal limit                      | xs:string(5)    | LMTTYP                 |   |
| R.30         | resEvaluation     | Evaluation of the result                 | xs:string (5)   | RESEVAL                | Mandatory   |
| R.31         | actTakenCode      | Action Taken                             | xs:string (5)   | ACTION                 |   |
| R.32         | resComm           | Comment of the result                    | xs:string (250) |                        |   |

(a): Blank positions in the column refer to data elements that are not mandatory for the pesticide data collection.

### 3. Sample information

#### 3.1. Laboratory sample code (labSampCode, S.01)

This data element is mandatory. The laboratory sample must be identified by a unique sample identification number not longer than 20 characters. Where multiple analytical results are reported for a sample (e.g. results for different pesticide residues analysed in the same sample using multi-residue methods and/or several single residue methods), the same laboratory sample code has to be used for the different records.

#### 3.2. Language (lang, S.03)

For this mandatory data element the catalogue LANG has to be used. With this data element the data transmitter defines which language was used for coding free text fields (i.e. fields with data type xs:string where no catalogues are used for coding). It is recommended to report the information in English (language code: en) to facilitate the data management at EFSA level.

#### 3.3. Country of sampling (sampCountry, S.04)

The country of sampling is the country where in accordance with Article 27 of Regulation (EC) No 396/2005 the official sample was taken. For coding, the catalogue COUNTRY has to be used. According to the business rules only the codes for the reporting countries (28 EU Member States, Iceland and Norway) are accepted. The codes for the French Overseas Territories are not valid for this data element.

#### 3.4. Country of origin of the product (origCountry, S.06)

This data element specifies the origin of the food product analysed. The catalogue COUNTRY has to be used for the coding. All codes of this catalogue except EU, XD and XE are valid for this data element. In addition to the specific country codes of ISO-3166-1 standard, the following codes are available in this catalogue for cases where the origin of the sample could not be clearly identified:

- AA - Unspecified country that is part of the European Economic Area (EEA),
- XC - Unspecified third country (non-EEA country) and
- XX - Unknown, nothing is known about the country

In the past EFSA noted that in some cases data providers used the code for the country where the product was packed instead of the code for the country where the food product was produced (e.g. rice with country of origin Iceland). This should be avoided; reporting countries are encouraged to identify the origin of the product, in particular for unprocessed (raw) products and for cases where the MRL was exceeded.

For certain analysis in the Annual Report on Pesticide Residues EFSA will recode the country of origin reported by the data provider.<sup>7</sup>

More details on the origin of the product can be reported in the data element Product comment.

Related data element: 3.9 Product comment (prodCom, S.21)

#### 3.5. Product code (prodCode, S.13)

This data element together with the data element prodTreat is essential to describe unambiguously the food product analysed to which the result of the pesticide residue analysis refers to. The food classification defined in Annex I of Regulation (EC) No 396/2005 is the basis of the MATRIX catalogue

<sup>7</sup> French Guinea (GF), Guadeloupe (GP), Martinique (MQ), French Polynesia (PF), Saint Pierre and Miquelon (PM), Réunion (RE), French Southern Territories (TF), Wallis and Futuna Island (WF), Mayotte (YT) are considered as part of France (FR), Hongkong (HK) is recoded to China (CN); samples of fish and fish products from Faroe Islands (FO) are recoded to Denmark (DK); Bonaire, Sint Eustatius and Saba (BQ) is recoded to the Netherlands (NL).

that has to be used for the coding of prodCode. The data transmitter should be aware that the food classification of Annex I implements a food hierarchy of up to four hierarchy levels:

- Hierarchy level 1: Vegetables, code P0200000A
  - Hierarchy level 2: Fruiting vegetables, code P0230000A
    - Hierarchy level 3: Solanacea, code P0231000A
      - Hierarchy level 4: Tomatoes, code P0231010A

In many cases the food products at the lowest hierarchy level represent a representative lead crop with other related varieties or other products classified under the same code (e.g. Physalis and gojiberry are classified under the same code as tomatoes). For describing the food product analysed, normally the code reflecting the lowest level of the hierarchy should be used (e.g. select the code for tomatoes instead of the code for Solanacea). For reporting results on Physalis also the code for tomatoes has to be selected. In the data element Product full text description (prodText, S.14) the more detailed description of the food product can be provided (e.g. Physalis) (see also Section 3.6 and Example 1).

For the 2014 data collection the MATRIX catalogue has been updated implementing the modifications of the food classification introduced by Commission Regulation (EU) No 212/2013<sup>8</sup>. The codes for plant products and for most animal products remained unchanged, but the description of the codes has been aligned with the description of the food products in the cited regulation.

If a food product is not listed in the food classification and it cannot be found in the 5<sup>th</sup> column of Regulation (EU) No 212/2013 (Examples of related varieties or other products to which the same maximum residue levels (MRL) applies), EFSA recommends consulting Commission Regulation (EU) No 752/2014<sup>9</sup>. Although this regulation will become applicable only as from 1 January 2015, it can already be used for the coding of products analysed in 2014 for cases where the previous legislation does not give clear guidance on the allocation of a food product in the food hierarchy used for pesticide residues.

The prodCode reflecting the main component should be selected to describe composite food (e.g. the prodCode for barley should be used for reporting results for beer). In these cases a detailed description of the product analysed should be provided in the data element prodText.

For food products that cannot be found in the food classification, the prodCode XXXXXXA (not in list) shall be used (see Example 2). All results for samples coded with "not in list" will be checked by EFSA individually and where relevant, proposals for recoding will be made.

One important change introduced in 2014 refers to the codes that were previously used for meat of swine, bovine, sheep, goat, horses (including asses, mules or hinnies), poultry, and other farm animals. With Regulation (EU) No 212/2013 a new provision is introduced: the legal limits are applicable to muscle (i.e. meat after removal of trimmable fat) instead of to meat (which is a mixture of muscle and fat). This change in the legislation has been reflected in the MATRIX catalogue by replacing the codes for meat with new codes for muscle. The changes for the affected food products are summarised in Table 2. The old codes will no longer be accepted.

<sup>8</sup> Commission Regulation (EU) No 212/2013 of 11 March 2013 replacing Annex I to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards additions and modifications with respect to the products covered by that Annex. OJ L 174, 9.7.2010, p. 18–39.

<sup>9</sup> Commission Regulation (EU) No 752/2014 of 24 June 2014 replacing Annex I to Regulation (EC) No 396/005 of the European Parliament and of the Council. OJ L 208, 15.7.2014, p. 1–71.

**Table 2:** Impact of revision of the food classification in Regulation (EU) No 212/2013 on the coding of products of animal origin

| Previous years                      |   | Reporting as from 2014              |                           |
|-------------------------------------|---|-------------------------------------|---------------------------|
| 2013<br>Code in MATRIX<br>catalogue | Code description  | 2014<br>Code in MATRIX<br>catalogue | Code description          |
| P1011010A                           | Swine Meat  | P1011010B                           | Swine Muscle              |
| P1012010A                           | Bovine Meat   | P1012010B                           | Bovine Muscle             |
| P1013010A                           | Sheep Meat  | P1013010B                           | Sheep Muscle              |
| P1014010A                           | Goat Meat   | P1014010B                           | Goat Muscle               |
| P1015010A                           | Horses, asses, mules or hinnies Meat  | P1015010B                           | Equine Muscle             |
| P1016010A                           | Poultry — chicken, geese, duck, turkey and Guinea fowl — ostrich, pigeon Meat | P1016010B                           | Poultry Muscle            |
| P1017010A                           | Other farm animals Meat   | P1017010B                           | Other farm animals Muscle |

Related data elements: 3.6 Product full text description (prodText, S.14), 3.8 Product treatment (prodTreat, S.17), Annex A – MatrixTool

### 3.6. Product full text description (prodText, S.14)

This data element is not mandatory unless the code XXXXXA (Not in list) is used to describe the product analysed (see also Section 3.5 Product code (prodCode, S.13)). The prodText field should be used to provide more details describing the food product analysed, e.g. to specify food products that are not in the MATRIX catalogue. Examples can be found below.

**Example 1:** How to code a product not included in the MATRIX catalogue (e.g. clementine)

| Data element | Element value (catalogue) | Code description | Note   |
|--------------|---------------------------|------------------|--|
| prodCode     | P0110050A (MATRIX)        | Mandarins        | Since clementine belongs to the food group mandarins, the code for mandarins has to be selected from the MATRIX catalogue. |
| prodText     | Clementine                |                  | The free text "Clementine" shall be reported in the prodText field to describe the nature of the sample.                   |

**Example 2:** How to code a product neither included neither in the MATRIX catalogue nor in column 5 of Regulation (EU) No 212/2013, Examples of related varieties or other products to which the same MRL applies

| Data element | Element value (catalogue)   | Code description | Note  |
|--------------|---|------------------|---|
| prodCode     | XXXXXXA (MATRIX)  | Not in list      | Before using the code XXXXXA for "Not in list", consult Regulation (EU) No 752/2014 Part A and Part B whether the product is listed.                |
| prodText     | Arracacha roots (novel food derived from roots of <i>Arracacia xanthorrhiza</i> ) |                  | If the value XXXXXA (Not in list) is used to describe the product analysed, then the prodText data element has to be reported on a mandatory basis. |

Related data elements: 3.5 Product code (prodCode, S.13), 3.8 Product treatment (prodTreat, S.17)

### 3.7. Method of production (prodProdMeth, S.15)

This element is mandatory for the pesticide residue data collection. Only a few values are valid codes for this data element to be selected from the PRODMD catalogue (see Table 3).

EFSA uses this information to perform the data analysis regarding the residue situation in organic food compared with non-organic food.

Please note that the other codes (e.g. under glass/protected growing conditions) are not accepted for the pesticide residue data reporting.

Additional information on the production method can be reported in the prodCom data field.

**Table 3:** Codes for describing method of production (PRODMD catalogue)

| Element value | Code description           |
|---------------|----------------------------|
| <b>PD07A</b>  | Organic production         |
| <b>PD09A</b>  | Non-organic production     |
| <b>PD12A</b>  | Integrated Pest Management |
| <b>Z0215</b>  | Production method unknown  |

Related data element: 3.9 Product comment (prodCom, S.21)

### 3.8. Product treatment (prodTreat, S.17)

This mandatory data element is essential to describe unambiguously the food product analysed to which the result of the pesticide residue analysis refers to. The food product described in the prodCode needs to be specified in more detail by using a code from the catalogue PRODTR.

#### 3.8.1. Unprocessed products (T999A)

If the food product analysed fully complies with the description in the last column of Regulation (EU) No 212/2013, a product should be reported as unprocessed (T999A). 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 (example oranges, walnuts after removal of shell, table grapes after removal of stems, olives for oil production of table olives, fresh herbs, dry beans, coffee beans (green beans)) (see Example 3). For cereal grains the MRL are set for whole grains without processing, thus the products that are usually moved in trade. For rice the MRL are set for brown rice (husked rice). If polished rice is analysed, it has to be reported as processed (see Section 3.8.2).

**Example 3:** How to report results for dry beans (pulses)

| Data element     | Element value (catalogue) | Code description | Note   |
|------------------|---------------------------|------------------|--|
| <b>prodCode</b>  | P0300010A (MATRIX)        | Beans (dry)      | Dry beans are classified in the group of pulses.   |
| <b>prodTreat</b> | T999A (PRODTR)            | Unprocessed      | 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. |

It should be highlighted that Annex I of Regulation (EC) contains some processed products (e.g. tea of *Camellia sinensis*, dried herbal infusions, hops, spices). As long as the products correspond with the description in the MRL legislation, they should be reported as unprocessed (see Example 4).

**Example 4:** How to report results for dry camomile flowers (herbal infusion)

| Data element | Element value (catalogue) | Code description | Note  |
|--------------|---------------------------|------------------|---|
| prodCode     | P0631010A (MATRIX)        | Camomile flowers | Herbal infusions, according to Annex I of Regulation (EC) No 396/2005, are dried products.  |
| prodTreat    | T999A (PRODTR)            | Unprocessed      | If the sample analysed complies with the description of Annex I of Regulation (EC) No 396/2005, the product is considered as being unprocessed. |

Food products that were subject to mechanical crushing operation without segregation or removal of parts of the crop (e.g. chopping, grinding) should be also reported as unprocessed.

**Example 5:** How to report results for ground/milled spices, e.g. nutmeg

| Data element | Element value (catalogue) | Code description | Note   |
|--------------|---------------------------|------------------|--|
| prodCode     | P0810090A (MATRIX)        | Nutmeg           |  |
| prodTreat    | T999A (PRODTR)            | Unprocessed      | Samples that have been ground, crushed, milled, powdered and/or pulverised have to be considered as Unprocessed samples, as long as the process does not involve a separation of a certain fraction (like milling of cereals). Thus, they have to be reported with the code T999A (Unprocessed). Typically, this applies to dry spices marketed e.g. in glasses. |

**3.8.2. Processed products (other codes from catalogue PRODTR)**

For processed products derived from raw agricultural products as specified in Annex I of Regulation (EC) No 396/2005 that do not fall under the categories described under Section 3.8.1 Unprocessed products (T999A), the most specific code for processing has to be selected from the catalogue PRODTR (see Table 4).

Typical processed products are juices, canned vegetables, olive oil, wine, wheat flour and butter. Food products falling under legislation on food for infants and young children<sup>10,11</sup> are also always processed.

<sup>10</sup> Commission Directive 2006/125/EC of 5 December 2006 on processed cereal-based foods and baby foods for infants and young children. OJ L 339, 6.12.2006, p. 16–35.

<sup>11</sup> Commission Directive 2006/141/EC of 22 December 2006 on infant formulae and follow-on formulae and amending Directive 1999/21/EC. OJ L 401, 30.12.2006, p. 1–33.



**Table 4:** Codes to be used to describe processed products (PRODTR catalogue)<sup>12</sup>

| Element value         | Code description            | Note   |
|-----------------------|-----------------------------|--|
| <b>T100A</b>          | Processed                   | To be used for processed products that cannot be described with the classes below. If this code is used, more details on the type of product should be reported in the data element ProdText.<br>Food for infants and young children as defined in the baby food legal framework (Directive 2006/125/EC and Directive 2006/141/EC) should always be coded as processed (T100A).  |
| <b>T101A or T102A</b> | Peeling                     | Products that were analysed after peeling. In general the results for 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. (Please check the product description in Annex I of Regulation (EC) No 396/2005 first).<br>This code should <u>not</u> be used for products like shelled nuts or for husked cereals.   |
| <b>T103A</b>          | Juicing                     | For fruit or vegetables juices (e.g. orange juice, carrot juice).<br>This code should <u>not</u> be used for products like almond milk, soya milk, rice milk (these products should be coded with T100A, processed).   |
| <b>T104A</b>          | Oil production              | For vegetable oils more specific codes for different types of oil processing are available (T105A to T109A). However, to facilitate the data analysis it is recommended to use only T104A.<br>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 this type of products use T100A and provide more detailed information in prodText).   |
| <b>T110A</b>          | Milling                     | The generic code for milling should be used only for milled cereal products, except 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 code T110A is used, a more detailed description of the product analysed should to be provided in the field prodText.<br>The code should <u>not</u> be used for minced, ground or chopped products (e.g. ground poppy seed or spices, see also Example 5). |
| <b>T111A</b>          | Milling - unprocessed flour | For wholemeal flour.   |
| <b>T112A</b>          | Milling - refined flour     | For refined (white) flour.   |
| <b>T113A</b>          | Milling - bran production   | For cereal bran.   |
| <b>T114A</b>          | Polishing                   | Cereal polishing; it applies to polished (white) rice, oats flakes or barley (pearl barley).   |
| <b>T116A</b>          | Sugar production            | Extraction of sugar; it applies to sugar cane and sugar beet.  |
| <b>T120A</b>          | Canning                     | 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 the code T121A – Preserving.  |

<sup>12</sup> 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.

| Element value | Code description                  | Note  |
|---------------|-----------------------------------|---|
| <b>T121A</b>  | Preserving                        | This code should be used for jams, marmalades (e.g. strawberry jam, orange marmalade, apple sauce, ketchup). For products in brine the use of T120A is recommended (canning). Often a clear distinction between canning and preserving is not possible.   |
| <b>T122A</b>  | 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 made of grapes or other fruits (see code T123A).  |
| <b>T123A</b>  | Wine production                   | Production of wine made of grapes or other fruits like apple wine, including must. In case other 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 below)  |
| <b>T124A</b>  | Wine production - white wine      |   |
| <b>T125A</b>  | Wine production - red wine        |   |
| <b>T128A</b>  | Cooking in water                  | For food products that underwent boiling or poaching (e.g. precooked potatoes).   |
| <b>T129A</b>  | Cooking in oil (Frying)           | For products fried in hot oil (e.g. potatoes chips).  |
| <b>T130A</b>  | Cooking in air (Baking)           | For products that were baked or roasted at a high temperature in air (e.g. bread, roasted coffee beans or roasted peanuts).   |
| <b>T131A</b>  | Dehydration                       | Applies to dried products (e.g. grapes (raisins), plums, apricots, dates, dry potato flakes, fungi, dried basil leaves etc.). See also code T136A.<br>This code should <u>not</u> be used for dried products that correspond with the description in Annex I (e.g. dry pulses, tea, herbal infusions such as dried ginger roots, cereals dried to standard moisture content as described under Section 3.8.1 Unprocessed products (T999A))□ |
| <b>T132A</b>  | Fermentation                      | Fermentation for purposes other than the production of alcoholic beverages (applies to cabbage, soya sauce). 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.  |
| <b>T134A</b>  | Churning                          | For dairy products obtained from milk of animal origin only (e.g. cream, butter, cheese, yogurt, kefir, etc.). This code should <u>not</u> be used for pasteurised or sterilised milk (see code T150A). More details on the type of product analysed should be reported in the prodText data element.   |
| <b>T136A</b>  | 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).  |
| <b>T148A</b>  | Wet-milling                       | Code applicable to describe starch (e.g. maize starch, rice starch).  |
| <b>T150A</b>  | Milk pasteurisation               | This code can exclusively be used for milk of animal origin (see Example 7).  |
| <b>T998A</b>  | Freezing                          | The MRLs established under Regulation (EC) No 396/2005 equally apply to 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 (see Example 6). This code should <u>not</u> be used if the product was frozen after the sampling.   |

Since the residue concentration is normally not influenced by freezing, samples of frozen products are considered in the data analysis performed by EFSA as unprocessed, unless the product has been subject to additional processing (see Example 6).

**Example 6:** How to report results for frozen spinach

| Data element | Element value (catalogue) | Code description | Note  |
|--------------|---------------------------|------------------|---|
| prodCode     | P0252010A (MATRIX)        | Spinach          | Spinach is classified under vegetables (fresh or frozen), leaf vegetables and fresh herbs, spinach and similar (leaves). The code for the lowest hierarchy level of the food classification has to be selected. |
| prodTreat    | T998A (PRODTR)            | FREEZING         | If the sample did not undergo any other treatment, the code for freezing should be used to describe the product.  |

Pasteurised or sterilised milk should be coded as described below. However, for the data analysis EFSA will pool the results for processed milk samples reported as T150A with the results reported for unprocessed milk (see Example 7).

**Example 7:** How to report results for a sample of pasteurised/sterilized milk of animal origin

| Data element | Element value (catalogue) | Code description    | Note  |
|--------------|---------------------------|---------------------|---|
| prodCode     | P1020010A (MATRIX)        | Milk cattle         |   |
| prodTreat    | T150A (PRODTR)            | Milk pasteurisation | 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 will be pooled with milk samples reported as T999A. |

If necessary, more details to specify the sample analysed can be reported under the data element Product full text description (prodText, S.14).

Related data elements: 3.5 Product code (prodCode, S.13), 3.6 Product full text description (prodText, S.14)

### 3.9. Product comment (prodCom, S.21)

This data element is optional. It should be used to provide further information on the origin of the sample (see Section 3.4) or on the method of production (see Section 3.7). Any further information describing the nature of the sample analysed should be reported in prodText.

Related data elements: 3.4 Country of origin of the product (origCountry, S.06), 3.6 Product full text description (prodText, S.14), 3.7 Method of production (prodProdMeth, S.15)

### 3.10. Sampling year (sampY, S.28)

The element Sampling year is mandatory. The year should be reported in the format YYYY (e.g. 2014).

### 3.11. Sampling month (sampM, S.29) and sampling day (sampD, S.30)

The month and the day of sampling are optional fields. The date should be reported as integers (1 or 2 digits, as appropriate) (e.g. 3 for March, 19 for the day). Although these data elements are not mandatory, they may be important for checking MRL compliance in case the legal limit changed during the calendar year as normally the MRL valid on the day of sampling is applicable.

### 3.12. Sampling programme code (progCode, S31)

The data element Sampling programme code is optional; reporting countries can use this field to specify national sampling programmes or project under which the sample was taken. No SSD catalogue is needed for this data element. This data element should not be used to report the legal reference of the sampling programme or the type of sampling programme.

Related data elements: 3.13 Programme legal reference (progLegalRef, S.32), 3.15 Type of sampling programme (progType, S.34)

### 3.13. Programme legal reference (progLegalRef, S.32)

The data element Programme legal reference is mandatory for the pesticide data collection; it is used to specify the legal framework under which the sample was taken and thus defines which MRLs and which residue definitions are applicable to the sample (see also Section 6.1).

An unambiguous coding is essential in view of the storage of the data in the Data Warehouse, the central repository for all EFSA data collections. Although currently no catalogue is available for this data element, EFSA suggests to use the catalogue developed for SSD2, using the codes as defined in Table 5. A new business rule checking compliance with the valid codes has been set up.

**Table 5:** Codes to be used to describe the programme legal reference<sup>13</sup>

| Element value | Code description  | Note   |
|---------------|---|--|
| <b>N027A</b>  | Sample taken under Regulation (EC) No 396/2005                                | Code to be used for samples of food products defined in Annex I of Regulation (EC) No 396/2005 (processed and unprocessed products) taken in the framework of the EU-coordinated programme and the national control programmes defined in Article 29 and 30 of this regulation. Also samples taken in the framework of Regulation (EC) No 669/2009 should be coded with N027A. |
| <b>N028A</b>  | Samples of food products falling under Directives 2006/125/EC and 2006/141/EC | Directives establishing MRL specific for baby food. It is noted that certain products are marketed as food for infants and young children (e.g. juices). However, as these products would not fall under the baby food legislation, they should be reported under N027A (see also Section 7.1).  |
| <b>N247A</b>  | Samples taken under Directive 96/23/EC  | Legislative framework for the control of vet drug residues in samples of animal origin see also Section 7.3).  |
| <b>N018A</b>  | Regulation (EC) No 882/2004 <sup>14</sup>                                     | Samples not falling under any of the three types of legislation mentioned above (e.g. for reporting results concerning residues of safeners and synergists) (see also Section 7.4).  |

It should be highlighted that in contrast to previous data collections, samples taken in the framework of Regulation (EC) No 669/2009<sup>15</sup> on the increased level of official controls on imports of certain food

<sup>13</sup> Currently, no SSD catalogue is available for this data element; therefore EFSA suggests to use the catalogue developed for SSD2 for the description of the programme legal reference.

<sup>14</sup> Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. OJ L 165, 30.4.2004, p. 1-141.

of non-animal origin should be also reported using the code for Regulation (EC) No 396/2005, since the residue legal limits specified in this legislation are equally applicable to the samples subject to import controls (see also Section 3.15 Type of sampling programme (progType, S.34)).

Related data elements: 3.12 Sampling programme code (progCode, S31), 3.15 Type of sampling programme (progType, S.34), 6.1 Legal limit for the result (resLegalLimit, R.28)

### 3.14. Sampling strategy (progSampStrategy, S.33)

The data element sampling strategy is a mandatory element for pesticide residue monitoring; the valid options for coding have to be selected from the catalogue SAMPSTR (see Table 6).

**Table 6:** Codes to be used to describe sampling strategy (SAMPSTR catalogue)

| Element value | Code description   | Note   |
|---------------|--------------------|--|
| <b>ST10A</b>  | Objective sampling | For sample that were taken as a surveillance samples (random sampling), e.g. for the EU-coordinated monitoring programmes, but also for samples taken under national control programmes where samples were selected without specific targeting towards products or producers that were likely to be non-compliant. |
| <b>ST20A</b>  | Selective sampling | E.g. for samples taken under the national control programmes, which are targeted towards products from a country where higher MRL non-compliance rate was identified in the past for certain food products.  |
| <b>ST30A</b>  | Suspect sampling   | For risk based sampling, e.g. to enforce provisions of Regulation (EC) No 669/2009 on the increased level of official controls on imported food/feed, for samples taken after RASFF notifications or follow-up enforcement samples.  |

**Example 8:** How to report a suspect sample, notified under RASFF

| Data element            | Element value (catalogue) | Code description | Note  |
|-------------------------|---------------------------|------------------|---|
| <b>prodCode</b>         | P0256080A (MATRIX)        | Basil            |   |
| <b>progSampStrategy</b> | ST30A (SAMPSTR)           | Suspect sampling | A sample of basil checked for the presence of a specific pesticide residue in the framework of an import control, as a consequence of a RASFF notification or a suspect product taken at wholesaler/retailer level. |

Related data elements: 3.13 Programme legal reference (progLegalRef, S.32)

### 3.15. Type of sampling programme (progType, S.34)

This data element is mandatory; it is used to discriminate between samples taken in the framework of the EU coordinated programme as defined in Article 29 of Regulation (EC) No 396/2005 and other sampling programmes. For coding the catalogue SRCTYP has to be used, taking into account the conventions described in Table 7.

<sup>15</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

**Table 7:** Codes to be used to describe the type of sampling programme (SRCTYP catalogues)

| Element value | Code description  | Note   |
|---------------|---|--|
| <b>K005A</b>  | Official (National) programme                             | For coding of samples taken under national control programmes as defined in Article 30 of Regulation (EC) No 396/2005.   |
| <b>K009A</b>  | Official (EU) programme                                   | Samples taken in the framework of the EU coordinated programme (EUCP) as defined in Article 29 of Regulation (EC) No 396/2005. For 2014 the EUCP was defined in Regulation (EU) No 480/2013 <sup>16</sup> (see Appendix A –EU-coordinated monitoring programme).<br>If the samples were analysed for more pesticides than described in the monitoring regulation, the sample should be coded with K018A (see below). |
| <b>K018A</b>  | Official (National and EU) programme                      | This code should be used for samples taken in the framework of Regulation (EU) 480/2013 (EU-coordinated control programme) which were analysed for a wider range of pesticides than requested in the EUCP or for other analytes, such as safeners, synergists, residues of veterinary medicinal products (dual use substances).  |
| <b>K019A</b>  | Pesticide EU increased control programme on imported food | This code is used to describe samples that were taken under Regulation (EC) No 669/2009  |

In Table 8 the valid combinations of codes for the following data elements are reported: Type of sampling programme (progType, S.34)/Programme legal reference (progLegalRef, S.32)/Sampling strategy (progSampStrategy, S.33). Please see also Table 5, Table 6 and Table 7.

**Table 8:** Combinations of codes to be used to describe the type of sampling programmes/ programme legal reference/sampling strategy (SRCTYP/SAMPSTR catalogues)

|                                   |  | Programme legal reference       |                         |                                     |  |                                  |                                    |
|-----------------------------------|--|---------------------------------|-------------------------|-------------------------------------|--|----------------------------------|------------------------------------|
|                                   |  | N027A<br>(Regulation 396/2005)  |                         |                                     | N028A<br>(Directives<br>125/2006/EC<br>and<br>141/2006/EC) | N247A<br>(Directive<br>96/23/EC) | N018A<br>(Regulation<br>882/2004)  |
|                                   |  | EU-<br>coordinated<br>programme | National<br>programmes  | Increased<br>import food<br>control | Baby food  | Vet<br>medicines                 | e.g.<br>synergists<br>and safeners |
| <b>Type of sampling programme</b> | <b>K005A</b><br>(national programmes)            | -                               | ST10A<br>ST20A<br>ST30A | -                                   | ST10A<br>ST20A<br>ST30A                                    | ST10A<br>ST20A<br>ST30A          | ST10A<br>ST20A<br>ST30A            |
|                                   | <b>K009A</b><br>(EU-coordinated programme)       | ST10A<br>ST20A                  | -                       | -                                   | ST10A<br>ST20A   | -                                | -                                  |
|                                   | <b>K018A</b><br>(EU and national programmes)     | ST10A<br>ST20A                  | ST10A<br>ST20A          | -                                   | ST10A<br>ST20A   | ST10A<br>ST20A                   | ST10A<br>ST20A                     |
|                                   | <b>K019A</b><br>(increased control Reg 669/2009) | -                               | -                       | ST30A                               | -  | -                                | -                                  |

<sup>16</sup> Commission Implementing Regulation (EU) No 480/2013 of 24 May 2013 amending Implementing Regulation (EU) No 788/2012 as regards the period of analysis of certain pesticides performed on a voluntary basis Text with EEA relevance. OJ L 139, 25.5.2013, p. 4–4.

Related data elements: 3.13 Programme legal reference (progLegalRef, S.32), 3.14 Sampling strategy (progSampStrategy, S.33)

### 3.16. Sampling method (sampMethod, S.35)

The data element sampling method is mandatory; the catalogue SAMPMD provides the valid codes for this field. Official sampling methods are defined for different food or feed domains. For samples reported to EFSA under the pesticide data collection, the cases summarised in Table 9 are relevant.

**Table 9:** Codes to be used to describe the type of sampling method (SAMPMD catalogue)

| Element value | Code description   | Note  |
|---------------|--|---|
| <b>N009A</b>  | According to Directive 2002/63/EC <sup>17</sup>          | For samples taken in the framework of Regulation (EC) No 396/2005.  |
| <b>N014A</b>  | According to Regulation 152/2009/EC <sup>18</sup>        | For the official control of feed.   |
| <b>N010A</b>  | According to Commission Decision 97/747/EC <sup>19</sup> | For monitoring of certain substances and residues thereof in certain animal products in the framework of Directive 96/23/EC <sup>20</sup> .   |
| <b>N001A</b>  | Individual/single  | To be used for products not covered by abovementioned sampling methodologies (e.g. for honey) or e.g. for single samples (e.g. one animal or one fruit) which are not representative for a lot/batch. |
| <b>N008A</b>  | Unknown  | This code should be used if no information on the sampling method is available.   |

Related data element: 3.13 Programme legal reference (progLegalRef, S.32)

### 3.17. Sampling point (sampPoint, S.39)

This element is mandatory for all the data collections, including the pesticide residue data collection, and defines the point of the food chain where the sample was taken.

The controlled terminology to be used in the data element is based on a list of terminology developed by EUROSTAT (2010). The list details the activities of establishments at different points in the food chain. The list of activities of the sampling points proposed is subdivided into three hierarchy levels, the first of which is intended to identify the main steps in the production/consumption of food:

**Table 10:** Codes to be used to describe the type of sampling point (SMPNT catalogue)

| Element value                 | Code description                        | Note   |
|-------------------------------|---|--|
| <b>Codes starting with E1</b> | Primary production                      | Primary production includes both growing crops, rearing of animals and fishery activities. |
| <b>Codes starting with E3</b> | Manufacturing                           |  |
| <b>Codes starting with E5</b> | Distribution: wholesale and retail sale |  |
| <b>Codes starting with E6</b> | Packaging                               |  |

<sup>17</sup>Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC. OJ L 187/30, 16.7.2002, p. 1–14.

<sup>18</sup>Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed, OJ L54, p 1–130.

<sup>19</sup>The Commission Decision mentioned in the SSD catalogue has been updated since the decision has been amended by Commission Decision 98/179/EC (Commission Decision of 23 February 1998 laying down detailed rules on official sampling for the monitoring of certain substances and residues thereof in live animals and animal products, OJ L 65, p 31–98)

<sup>20</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, 23.5.1996, p. 10–32



## 4. Laboratory information

### 4.1. Laboratory (labCode, L.1)

### 4.2. Laboratory accreditation (labAccred, L.2)

This mandatory element indicates whether the laboratories performing the analysis has been accredited as required in Article 12 of Regulation (EC) No 882/2004.<sup>21</sup>

For pesticide monitoring only two codes from the LABACC catalogue may be used (see Table 11).

**Table 11:** Codes to be used to describe the laboratory accreditation status (LABACC catalogue)

| Element value | Code description | Note  |
|---------------|------------------|---|
| <b>L001A</b>  | Accredited       | Accredited according to ISO/IEC 17025 for pesticides analysis.  |
| <b>L003A</b>  | None             | For results generated by laboratories not or not yet accredited according to ISO/IEC 17025 for pesticide residues (e.g. When the laboratory is awaiting the final audit form the accreditation body). |

### 4.3. Laboratory country (labCountry, L.3)

For coding, the catalogue COUNTRY has to be used. According to the business rules all codes except EU, XD and XE are accepted.

## 5. Analytical results

### 5.1. Result code (resultCode, R.01)

This element contains the unique identification number of an analytical result (determination) in the transmitted file. This element is mandatory; it will be used as reference for error messages and/or to identify records to be deleted or replaced during the data validation.

### 5.2. Year of analysis (analysisY, R.02)

The date of the analysis has to be reported. Three data elements are available for coding the year, the month and the day of the analysis (see also Sections 5.3 and 5.4). For pesticide monitoring only the year of the analysis is mandatory.

### 5.3. Month of analysis (analysisM, R.03)

Voluntary data element (see also Section 5.2)

### 5.4. Day of analysis (analysisD, R.04)

Voluntary data element (see also Section 5.2)

### 5.5. Parameter code (paramCode, R.06)

This mandatory data element is used to describe the substance(s) analysed for which the measured result is reported. The PARAM catalogue has been developed for coding of this variable; it contains the codes for the legal residue definitions as defined in Regulation (EC) No 396/2005, but also codes for other food domains or codes for substances that are a part of the legal residue definition for pesticides.

<sup>21</sup> Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. OJ L 165, 30.4.2004, p. 1–141.



Since the catalogue contains over 10.000 entries for all food domains (covering veterinary medicinal products, food and feed additives, flavourings, nutrients or contaminants etc.) it is not easy to find the correct codes for reporting results of pesticide residue analysis in the framework of Article 31 of Regulation (EC) No 396/2005. To facilitate the work for data providers and in order to avoid the selection of paramCodes not reflecting the valid legal residue definitions established for the different food products, the MatrixTool has been developed. The MatrixTool comprises a comprehensive list of the valid paramCodes for all the food products covered by Annex I of Regulation (EC) No 396/2005. Also for baby food the appropriate paramCodes can be found in the MatrixTool. A more detailed description of the MatrixTool is presented in Annex A of this document.

The MatrixTool will be used for data validation to identify invalid combinations of paramCodes/prodCodes and paramTypes.

If a sample was analysed for a substance that could not be found neither in the MatrixTool nor in the PARAM catalogue, the paramCode RF-XXXX-XXX-XXX (Not in list) should be selected. If this code is selected, the data element paramText becomes mandatory.

For feed and fish no legal residue definitions are established under Regulation (EC) No 396/2005. For these products any paramCode of the PARAM catalogue would be acceptable.

Related data element: 3.5 Product code (prodCode, S.13), 5.6 Parameter text (paramText, R.07), 5.7 Type of parameter (paramType, R.08), Annex A – MatrixTool

## 5.6. Parameter text (paramText, R.07)

The parameter text is a mandatory data element only if the paramCode RF-XXXX-XXX-XXX (Not in list) was used. The name of the parameter analysed should be reported preferably in English (ISO common name<sup>22</sup> or IUPAC name). In addition the CAS number should be reported. In all other cases the field can be left blank, since the text description of the paramCode (paramName in the PARAM catalogue) is applicable.

Related data element and Section: 5.5 Parameter code (paramCode, R.06)

## 5.7. Type of parameter (paramType, R.08)

The residue definitions can be broadly classified in simple residue definitions (i.e. residue definitions that contain only the parent compound) and residue definitions that comprise additional compounds such as metabolites (complex residue definitions). In enforcement practice it turned out that laboratories are not always in the position to analyse for the full legal (complex) residue definitions as required in Regulation (EC) No 396/2005, including all metabolites or degradation products that were included in the residue definition. For the correct interpretation of the results submitted to EFSA in the framework pesticide data collection it is essential to know exactly whether a sample was analysed for all components of the legal residue definition or not. For this purpose the mandatory data element paramType was introduced. Table 12 explains the codes from the PRTYP catalogue that can be used to describe the different options.

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<sup>22</sup> A comprehensive list of ISO common names for pesticides can be found under the following link: <http://www.alanwood.net/pesticides/index.html>

**Table 12:** Codes to be used to describe type of parameter (PRTYP catalogue)

| Element value | Description                            | Note   |
|---------------|--|--|
| <b>P005A</b>  | Full legal residue definition analysed | This code should be selected when the analytical measurement fully complies with the legal residue definition, thus for simple residue definitions or for complex residue definitions where the sample was analysed for all components of a complex residue definition.  |
| <b>P004A</b>  | Sum based on subset                    | This code should only be selected when the analytical measurement refers to a complex legal residue definition, where not all components have been analysed. P004A is not appropriate for simple residue definitions.  |
| <b>P002A</b>  | Part of a sum                          | This code has to be selected for the reporting of a single component included in a complex residue definition.<br>Results coded with P002A will normally not be included in the data analysis presented in the Annual Report on pesticide residues as regards the MRL compliance (see data analysis presented in Section 2 and 3 of the 2013 report (EFSA, 2015b)). For specific data analysis (e.g. for refined intake calculations) the results labelled with P002A might be used by EFSA. |

In the MatrixTool the valid paramType codes for the different combinations of prodCodes/paramCodes can be found.

It should be noted that for the 2014 data collection the code P003A (Sum) and the code P001A (Individual) shall no longer be used (these paramTypes will result in error messages in the data validation).

Examples for the use of the different codes are outlined below.

Since the results coded with P002A will not be used for the data analysis on MRL compliance it is important to report the results for incompletely analysed residue definitions with the P004A code (Example 11). If necessary, the result needs to be recalculated using molecular weight correction factors to comply with the component specified in the residue definition ("expressed as").

In addition to the result reported with P005A or P004A, the results for the individual components of a complex residue definition can be reported using the P002A code (see Example 12).

**Example 9:** How to report a result for a simple residue definition

| Data element     | Element value (catalogue) | Code description                       | Note   |
|------------------|---------------------------|--|--|
| <b>paramCode</b> | RF-0012-001-PPP (PARAM)   | Acephate                               | Simple residue definition (one component).   |
| <b>paramType</b> | P005A (PRTYP)             | Full legal residue definition analysed | Please note that only P005A is available in the MatrixTool for coding of results for the paramCode for acephate. |

**Example 10:** How to code a result for a complex residue definition where the sample was analysed for all components covered by the residue definition

| Data element     | Element value (catalogue) | Code description  | Note  |
|------------------|---------------------------|---|---|
| <b>paramCode</b> | RF-0139-001-PPP (PARAM)   | Dimethoate (sum of dimethoate and omethoate, expressed as dimethoate) | Complex residue definition (more than one component).   |
| <b>paramType</b> | P005A (PRTYP)             | Full legal residue definition analysed                                | If the sample was analysed for all components of the legal residue definition (in this example dimethoate and omethoate, recalculated to dimethoate) the code P005A shall be used. (For cases where the sample was analysed only for dimethoate or omethoate, see next examples). |

**Example 11:** How to code a result for a complex residue definition where the sample was analysed only for a part of a legal residue definition

| Data element     | Element value (catalogue) | Code description  | Note   |
|------------------|---------------------------|---|--|
| <b>paramCode</b> | RF-0139-001-PPP (PARAM)   | Dimethoate (sum of dimethoate and omethoate, expressed as dimethoate) | Complex residue definition (more than one component).  |
| <b>paramType</b> | P004A (PRTYP)             | Sum based on subset   | If the sample was analysed only for dimethoate or omethoate, the result has to be labelled with P004A. If only omethoate was analysed, the result has to be recalculated to dimethoate (as the residue definition specifies "expressed as dimethoate"). This recalculation can be omitted if the ratio of molecular weights is close to 1. |

In addition to the result reported in Example 10 or Example 11, the results of dimethoate or omethoate alone can be reported as described in Example 12; according to Regulation (EU) No 480/2013 Article 3(2), Member States shall report the analysis results of each of the components mentioned in the residue definition separately, as far as they are measured individually.

**Example 12:** How to report details on the actual substance part of a complex residue definition analysed. (Optional coding of a sample analysed only for a part of a legal complex residue definition (reporting of details in addition to the requirements described in Example 11).)

| Data element     | Element value (catalogue) | Code description | Note  |
|------------------|---------------------------|------------------|---|
| <b>paramCode</b> | RF-0139-002-PPP (PARAM)   | Omethoate        | The code for omethoate can be found in TableB of the MatrixTool.  |
| <b>paramType</b> | P002A (PRTYP)             | Part of a sum    | P002A has to be selected to report the result for the individual component of the complex legal definition analysed. The result should be expressed as omethoate. |

**Example 13:** How to report a residue of a pesticide, which is not listed in the PARAM catalogue

| Data element | Element value (catalogue) | Code description | Note   |
|--------------|---------------------------|------------------|--|
| paramCode    | RF-XXXX-XXX-XXX (PARAM)   | Not in list      | If the PARAM code "Not in list" is selected, then it becomes mandatory to fill-in the data element paramText.  |
| paramType    | P002A (PRTYP)             | Part of a sum    | EFSA proposes to use paramType P002A to the paramCode RF-XXXX-XXX-XXX (Not in list).   |
| paramText    | Pestidox (CAS 58-08-2)    |                  | Mandatory information if the code RF-XXXX-XXX-XXX is selected. The English ISO common name of the substance or the chemical name (IUPAC nomenclature) and the CAS number should be reported. |

Related data elements: 5.5 Parameter code (paramCode, R.06), 5.6 Parameter text (paramText, R.07), Annex A – MatrixTool

### 5.8. Analytical method code (anMethCode, R.10) and analytical method text (anMethText, R.11)

For coding the analytical method (anMethCode) the catalogue ANLYMD can be used. However, these data elements are not mandatory. If the code F001A (Classification not possible) is selected for describing the analytical method, the data element analytical method text becomes mandatory (conditional mandatory field).

### 5.9. Accreditation procedure for the analytical method (accredProc, R.12)

This data element describes the status of validation/accreditation for a combination of food product/parameter (pesticide) analysed. The available codes can be found in the catalogue MDSTAT; details on the use of the codes of this catalogues are summarised in Table 13.

**Table 13:** Codes to be used to describe the accreditation procedure for the analytical method (MDSTAT catalogue)

| Element value | Description                          | Comment   |
|---------------|--------------------------------------|---|
| V001A         | Accredited according to ISO/IEC17025 | The result was generated with a method fully validated according to the EU guidance document on analytical quality control (EC, 2013) and accredited under ISO 17025 for pesticide residue analysis for the pesticide/matrix combinations. Thus, it can be used for methods that were specifically accredited for the pesticide/matrix combination (fix scope) but also for results generated by laboratories with flexible scope accreditation.  |
| V005A         | Internally validated                 | Method fully validated according to the EU guidance document (EC, 2013), but not or not yet accredited under ISO 17025 for pesticide residue analysis (e.g. laboratory is waiting for the final accreditation body visit or certificate, for cases where method is fully validated according to SANCO document (EC, 2013), but accreditation body asks for more stringent requirements than ISO 17025 or for analytical results concerning commodity/pesticide combinations fully validated according to SANCO document but out of the accredited fix scope). |
| V999A         | Not validated                        | The result was generated with a method that was not validated and is not accredited. (e.g. validation was not successful according to SANCO document or for commodity/pesticide combinations that have only been partly validated according to SANCO document (EC, 2013))   |

## 5.10. Result unit (resUnit, R.13)

This mandatory data element defines the unit for the following data elements: Result LOQ (resLOQ, R.15), Result LOD (resLOD, R.14), Result value (resVal, R.18), Result value uncertainty standard deviation (resValUncertSD, R.21) and Result value uncertainty (resValUncert, R.22) and Legal limit for the result (resLegalLimit, R.28). For the pesticide data collection the only code accepted from the UNIT catalogue is G061A (Milligram/kilogram); also for liquid samples the results have to be reported as mg/kg.

Related data elements: 5.11 Result LOQ (resLOQ, R.15), 5.12 Result LOD (resLOD, R.14), 5.13 Result value (resVal, R.18), 5.16 Result value uncertainty standard deviation (resValUncertSD, R.21), 6.1 Legal limit for the result (resLegalLimit, R.28)

## 5.11. Result LOQ (resLOQ, R.15)

This data element is mandatory. The data provider has to report the Limit of Quantification (LOQ) of the analytical method used to analyse the sample described with the prodCode/prodTreat/prodText for the parameter described in the paramCode. The numerical LOQ (expressed as mg/kg) has to be provided for each determination. The same is true for screening methods (see also Section 5.20 Type of result (resType, R.27)).

The LOQ is the lowest validated residue concentration, which can be quantified and reported by routine monitoring with validated methods (see Regulation (EC) No 396/2005). The LOQ is often referred to as the Reporting Level.<sup>23</sup>

In case of complex residue definitions the overall LOQ for the paramCode has to be reported, which is normally the sum of the individual LOQs of each component of the residue definition. The discussions on how to express the LOQ for complex residue definitions are still on-going; taking into account the outcome of these discussions, the provisions may be amended for future data collections.

**Example 14:** How to report the resLOQ value for a complex residue definition

| Data element | Element value (catalogue) | Code description   | Note  |
|--------------|---------------------------|--|---|
| paramCode    | RF-0020-001-PPP (PARAM)   | Aldicarb (sum of Aldicarb, its sulfoxide and its sulfone, expressed as Aldicarb) | Complex residue definition (more than one component)<br>Aldicarb LOQ=0.007 mg/kg<br>Aldicarb-sulfone LOQ= 0.007 mg/kg<br>Aldicarb-sulfoxide LOQ= 0.007 mg/kg<br>(N.B. Since the molecular weight for the three components are very similar, in this example no adjustment for the molecular weight is required) |
| resLOQ       | 0.021                     |  | To be in line with the procedure for setting MRLs, the individual LOQs for the components of the residue definition should be summed up.<br>Overall LOQ for the legal residue definition =0.007+0.007+0.007=0.021   |

Related data elements: 5.10 Result unit (resUnit, R.13),

## 5.12. Result LOD (resLOD, R.14)

The Result LOD (Limit of Detection) is a voluntary element for pesticide monitoring. It can be used to report the LOD of the analytical method used to analyse the sample (expressed in mg/kg). The LOD is

<sup>23</sup> The reporting level has been defined in the Appendix of the 'Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed' (EC, 2013) as the lowest level at which residues will be reported as absolute numbers. It is equal to, or higher than the LOQ. For EU monitoring purposes where samples for surveys are analysed over a 12-month period, the same reporting limit should be achievable throughout the whole year.

the lowest concentration that can be determined to be statistically different from a blank. Please note that the LOD (Limit of Detection) should not be confused with the LOQ (Limit of Quantification).

Related data elements: 5.10 Result unit (resUnit, R.13), 5.11 Result LOQ (resLOQ, R.15)

### 5.13. Result value (resVal, R.18)

The data element resVal is a mandatory field if the pesticide analysed (paramCode) was found in concentrations at or exceeding the LOQ (i.e. resType is VAL, see Section 5.20). Otherwise, it should be left blank (for determinations < LOQ, resType is LOQ).

The measured residue concentration described in paramCode for the product analysed and described in prodCode, prodTreat, prodText has to be expressed in mg/kg. Normally, the result of a pesticide analysis should not be corrected for the recovery (for more details see Sections 5.14 and 5.15).

For baby food the result should be expressed for the product ready to eat, or, where relevant, for the reconstituted, diluted product. Further details for baby food samples can be found in Section 7.1.

For processed products in general, the results should be reported for the sample analysed, i.e. the processed product, without any recalculation of the result to the unprocessed product. The same applies to the resLOQ and resLOD (see also Example 19).

It should be highlighted that duplicate results (i.e. results of replicate analysis of the same sample) are not accepted. If the same sample was reanalysed (same test portion) by means of different analytical methods, the result derived with the most accurate or reliable analysis has to be reported. Where samples were analysed with equally accurate techniques, the mean value should be reported. The mean result shall also be reported where different subsamples were analysed (see also EC, 2013).

If a sample was analysed with screening methods, the data element resVal should be blank because for screening methods only negative results would be accepted (results below the LOQ, see also Section 5.20).

Related data elements: 3.1 Laboratory sample code (labSampCode, S.01), 5.10 Result unit (resUnit, R.13), 5.14 Result value corrected for recovery (resValRecCorr, R.20), 5.15, Result value recovery (resValRec, R.19), 5.19 Expression of result (exprRes, R.25), 5.20 Type of result (resType, R.27).

### 5.14. Result value corrected for recovery (resValRecCorr, R.20)

This data element is not mandatory. It is used to indicate whether a result reported in the data element resVal was corrected for the analytical recovery or not. According to the quality control guidance document (EC, 2013) normally residue data should not be adjusted for recovery, if the mean recovery obtained in the method validation for the matrix is in the range of 70 % to 120 %. In these cases the field should be blank or filled with "N", meaning that no correction for recovery was applied. However, if the recovery was not within the acceptable range and the analytical result was corrected for the analytical recovery, the field should be labelled with "Y" and the field resValRec has to be completed.

Related data elements: 5.13 Result value (resVal, R.18), 5.15 Result value recovery (resValRec, R.19)

### 5.15. Result value recovery (resValRec, R.19)

If the residue result reported in the field resVal was adjusted for recovery ("Y" in the field resValRecCorr), the recovery obtained in the method validation (expressed as percentage of the recovery, e.g. for 65 for 65 % recovery) used to recalculate the result has to be reported.

Related data elements: 5.13 Result value (resVal, R.18), 5.14 Result value corrected for recovery (resValRecCorr, R.20)



### 5.16. Result value uncertainty standard deviation (resValUncertSD, R.21) and Result value uncertainty (resValUncert, R.22)

These data elements are not mandatory for the pesticide data collection. The data elements were created to report the standard deviation for the uncertainty measure and the expanded uncertainty value (usually 95 % confidence interval) associated with the measurement (expressed in mg/kg). For pesticide residues the result reported in the data element Result value (resVal, R.18) should not be corrected for the measurement uncertainty; thus, the data elements should be left blank. Normally a 50 % default measurement uncertainty is applied at national level for compliance check (see also Section 6.3 Evaluation of the result (resEvaluation, R.30)).

Related data elements: 5.13 Result value (resVal, R.18), 6.3 Evaluation of the result (resEvaluation, R.30)

### 5.17. Percentage of moisture in the original sample (moistPerc, R.23)

Although this data element is not mandatory, it should be completed for processed products described with the product treatment code T131A (Dehydration) or T136A (Concentration) (see Section 3.8.2).

The moisture of the sample should be expressed as percentage of water in the sample (w/w, e.g. 8 % moisture for dehydrated chilli or 22 % moisture for orange juice concentrate). This information should be used to recalculate the legal limits for processed products (see also Section 6.1 Legal limit for the result (resLegalLimit, R.28) if no specific processing factors are available for the processed product.

The result of the pesticide analysis should be reported for the product as analysed (e.g. residue concentration measured in the dehydrated raisins) without adjustment for the dehydration. See also Section 5.19 Expression of result (exprRes, R.25).

Related data elements: 3.8 Product treatment (prodTreat, S.17), 5.19 Expression of result (exprRes, R.25), 6.1 Legal limit for the result (resLegalLimit, R.28)

### 5.18. Percentage of fat in the original sample (fatPerc, R.24)

This data element is not mandatory. It is not relevant for unprocessed plant commodities. For processed plant products, but also for unprocessed and processed animal products this data element may be relevant since the residue concentration in the samples analysed may be influenced by the fat content of the product (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, in particular for residue definitions marked as fat soluble (indicated by the suffix F in the MRL legislation) since 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, 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 6.3 Evaluation of the result (resEvaluation, R.30)). For cheese and other milk products the fat content should be expressed as percentage of the whole product (see Example 16) and not the fat content in the dry matter (NB. 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, EFSA will assume the sample analysed contained 4 % fat. It is important that in all cases the residue concentration measured has to be reported for the product analysed (see Section 5.19 Expression of result (exprRes, R.25)); the result should not be expressed for the fat fraction.

It should be highlighted that the new food classification applicable for the pesticide MRL legislation does not contain any more "meat" as a food product. Thus, results for animal tissues have to be reported separately for muscle (free of trimmable fat) and/or for fat, but not for samples that are a mixture of muscle and fat.

Related data element: 5.19 Expression of result (exprRes, R.25), 6.3 Evaluation of the result (resEvaluation, R.30)

### 5.19. Expression of result (exprRes, R.25)

For the pesticide monitoring data the only code that can be used from the EXRES catalogue is B001A (Whole weight). Thus, the results reported in the data elements Result value (resVal, R.18) and Result LOQ (resLOQ, R.15) have to be reported/expressed for the product analysed and described in the data elements prodCode, prodText and prodTreat.

Examples for reporting the results for processed products can be found below (Example 15, Example 16 and Example 19).

An example for reporting the results for certain food of animal origin can be found in Example 17 and Example 18.

For baby food it should be noted that according to Article 7(4) of Directive 2006/125/EC and Article 10 of Directive 2006/141 the legal limits are applicable for the reconstituted product. Thus, for these types of products the results should be reported for the ready-to-eat product or the reconstituted product prepared according to the label instructions (see Section 7.1).

For composite food the results should also be reported for the product analysed (see Example 20).

**Example 15:** How to report results for processed products (e.g. wild dried mushrooms)

| Data element | Element value (catalogue)     | Code description | Note  |
|--------------|-------------------------------|------------------|---|
| prodCode     | P0280020A (MATRIX)            | Wild fungi       |   |
| prodText     | <i>Boletus edulis</i>         |                  | Further description of the food product can be provided in this data element.   |
| prodTreat    | T131A (PRPTR)                 | Dehydration      |   |
| moistCont    | 9                             |                  | For dehydrated products the moisture content of the sample should be reported. Although the field is optional, it is important for dehydrated products. |
| exprRes      | B001A (EXRES)                 | Whole weight     | The only exprRes code accepted as valid.  |
| resComm      | PF 10 used for MRL compliance |                  | This data element can be used to report the processing factor (PF) that was used for checking MRL compliance.   |

**Example 16:** How to report the results for processed milk products (e.g. cheese)

| Data element | Element value (catalogue)                    | Code description | Note  |
|--------------|--|------------------|---|
| prodCode     | P1020010A (MATRIX)                           | Milk cattle      |   |
| prodText     | Camembert cheese with 48 % fat in dry matter |                  | Field to be used to describe in detail the nature of the product analysed |
| prodTreat    | T134A (PRPTR)                                | Churning         | To be used for dairy products   |
| moistPerc    | 50   |                  | Optional data element to report the moisture of the sample analysed       |



| Data element   | Element value (catalogue) | Code description | Note   |
|----------------|---------------------------|------------------|--|
| <b>fatPerc</b> | 24                        |                  | This information is required to check MRL compliance. Since for fat soluble residue definitions the MRL is set for milk with 4 % fat content, in a product with 24 % the acceptable residues for fat soluble substances (residue definitions labelled with (F) in Regulation (EC) No 396/2005) would be 6 times the MRL. |
| <b>exprRes</b> | B001A (EXRES)             | Whole weight     | For pesticides the results are usually expressed on whole product basis; thus the code B001A has to be selected. Do not express the result on fat basis.   |
| <b>resComm</b> |                           |                  | Not mandatory information. No further information would be required to describe the sample (e.g. no adjustment factor for milk products with different fat content than the default fat content is required since this information is already available in the data element fatPerc).                                    |

**Example 17:** How to report the results for swine muscle

| Data element     | Element value (catalogue) | Code description | Note  |
|------------------|---------------------------|------------------|---|
| <b>prodCode</b>  | P1011010B (MATRIX)        | Muscle (swine)   | Please note that the new food classification relevant for pesticide MRLs (Regulation (EC) No 212/2013) has been changed: meat (of different species) has been replaced by muscle i.e. meat after removal of trimmable fat). A new PARAM code has been allocated for the swine muscle.   |
| <b>prodTreat</b> | T999A (PRPTR)             | Unprocessed      |   |
| <b>fatPerc</b>   | 3                         |                  | Optional information. The fat content of swine muscle does not have to be reported. Information on the fat content for muscle, liver, kidney or other animal offals (any species) will not be taken into account by EFSA for the assessment, e.g. for assessment of MRL compliance etc. |
| <b>exprRes</b>   | B001A (EXRES)             | Whole weight     | B001A is the only code to be used for expressing the result. Thus, the results have to be expressed for swine muscle, and <u>not</u> for fat contained in swine muscle or for meat (mixture of muscle and fat).   |

**Example 18:** How to report the results for swine fat

| Data element     | Element value (catalogue) | Code description | Note  |
|------------------|---------------------------|------------------|---|
| <b>prodCode</b>  | P1011030A (MATRIX)        | Fat (swine)      | For swine fat and fat of other species the new food classification (Regulation (EC) No 212/2013) did not bring any changes. Thus the PARAM code used in the previous years allocated for the swine fat and fat of other species is still valid. |
| <b>prodTreat</b> | T999A (PRPTR)             | Unprocessed      |   |
| <b>fatPerc</b>   | 85                        |                  | The fat content of swine fat does not have to be reported. Any information reported in this field will not be taken into account by EFSA for the assessment, e.g. for assessment of MRL compliance.   |
| <b>exprRes</b>   | B001A (EXRES)             | Whole weight     | The only exprRes code accepted as valid.  |

**Example 19:** How to report the results for olive oil

| Data element     | Element value (catalogue)    | Code description          | Note  |
|------------------|------------------------------|---------------------------|---|
| <b>prodCode</b>  | P0402010A (MATRIX)           | Olives for oil production |   |
| <b>prodTreat</b> | T104A (PRPTR)                | Oil production            | Code recommended for oil production.  |
| <b>fatPerc</b>   | 99                           |                           | Not mandatory for vegetable oils. Any information reported in this field for vegetable oils will not be taken into account by EFSA for the assessment. For MRL compliance default processing factors will be used unless specific processing factors are available for the relevant residue definition. |
| <b>exprRes</b>   | B001A (EXRES)                | Whole weight              | The only exprRes code accepted. The result should <u>not</u> be recalculated to the unprocessed olives.   |
| <b>resComm</b>   | PF 2 used for MRL compliance |                           | If specific processing factors (PF) are available, they can be reported in this field. Otherwise default processing factors should be used for checking MRL compliance.   |

For composite food EFSA proposes to distinguish two cases:

- Composite food produced from one major ingredient and one or several minor ingredients (e.g. tomato sauce that contains some spices and inert ingredients like salt, or beer (main ingredient barley, minor ingredient hops). The results for this type of composite food should be reported using the prodCode for the main ingredient. In the field prodText the product can be described in more detail. The MRL for this type of composite food will be very similar to the MRL for the main ingredient, taking into account a processing factor.
- Composite food that contains several ingredients in similar amounts (e.g. pizza, lasagne, mixed vegetable soups). To describe the food product analysed, EFSA proposes to use the code for "not in list". The MRL that is applicable to the composite food should be calculated on the basis of the MRLs for the individual ingredients, taking into account the composition and eventual processing factors (see also Section 6.1).

**Example 20:** How to report the results for a composite sample

| Data element             | Element value (catalogue)  | Code description            | Note   |
|--------------------------|--|-----------------------------|--|
| <b>prodCode</b>          | XXXXXXA<br>(MATRIX)  | Not in list                 | For composite samples made up of different ingredients in approximately similar proportions (not a single main component) use on the code "Not in list".   |
| <b>prodTreat</b>         | T100A<br>(PRODTR)  | Processed                   | Composite food should always be labelled as processed products or using a specific code from Table 4.  |
| <b>prodText</b>          | Pizza made of wheat flour, tomatoes and cheese   |                             | The product analysed should be described in more detail in prodText.   |
| <b>resExpr</b>           | B001A<br>(EXRES)   | Whole weight                | The result for the whole product analysed (i.e. pizza) should be reported.   |
| <b>resLegalLimitType</b> | W002A<br>(LMTTYP)  | Maximum Residue Level (MRL) | Although no EU MRLs are set for composite food, the provisions of Article 20 of Regulation (EC) No 396/2005 are applicable. Thus, the MRLs set under this Regulation are applicable, taking into account changes in the levels of pesticide residues caused by processing and/or mixing. |
| <b>resComm</b>           | The MRL used for checking the sample compliance was calculated according to the composition of the product |                             | For more details see Section 6.1.  |

Related data elements: 5.13 Result value (resVal, R.18), 6.1 Legal limit for the result (resLegalLimit, R.28), 6.5 Comment of the result (resComm, R.32)

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

This data element is mandatory. For the pesticide monitoring data collection only three codes are accepted for the type of result. The description of the codes and the cases where to use them can be found in Table 14.

**Table 14:** Codes to be used to describe the result type (VALTYP catalogue)

| Element value | Code description            | Note   |
|---------------|-----------------------------|--|
| <b>VAL</b>    | Numerical Value             | If the residue specified in the field paramCode (see Section 5.5) 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 (see Section 5.13) has to be equal or greater than the LOQ of the analytical method reported in the data element resLOQ (see Section 5.11). |
| <b>LOQ</b>    | 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 (see Section 5.11).  |
| <b>BIN</b>    | Qualitative Value (Binary)  | If a sample was analysed with a screening method and the result was below the LOQ, the result type should be labelled with BIN. In this case the data element resVal should be left blank (see Section 5.11). In the field resLOQ the reporting value of the screening method (expressed in mg/kg) should be reported (see also 5.11 Result LOQ (resLOQ, R.15))                        |

The new code "BIN" has been introduced for the 2014 data collection. It should be used to label results generated with screening methods as defined in Annex II of Regulation (EU) 788/2012. According to this Regulation the reporting countries may use qualitative screening methods on up to 15% of the samples. It is noted that only negative results (below LOQ) can be reported with the code BIN; therefore the data element Result value (resVal, R.18) should be left blank.

If results generated with the qualitative screening methods are positive (above the LOQ/reporting value of the screening method), the samples have to be reanalysed with quantitative methods; the analytical results generated with the quantitative methods should then be coded with VAL or LOQ as usual.

Related data elements: 5.11 Result LOQ (resLOQ, R.15), 5.13 Result value (resVal, R.18)

## 6. Result evaluation

### 6.1. Legal limit for the result (resLegalLimit, R.28)

This non-mandatory data element of the SSD specifies the source of the legal limit used for compliance check (i.e. the legal limit applicable at the time of sampling). Depending under which legal framework the sample was taken (see Section 3.13) the legal limits (expressed in mg/kg) should be reported as outlined in Table 15.

**Table 15:** Legal limits to be reported in data element resLegalLimit

| Element value   | Note   |
|---|--|
| MRLs set in Regulation (EC) No 396/2005                             | For results that are checked against the MRL of Regulation (EC) No 396/2005, the relevant MRL from this legislation has to be reported. If the field is left blank and data element progLegalRef) Programme legal reference (progLegalRef, S.32) was coded with N027A, EFSA will assume that the MRL of Regulation (EC) No 396/2005 in place at the beginning of 2014 was applicable.<br>For food products produced organically and for imported products the MRLs established in Regulation (EC) No 396/2005 are equally applicable.<br>For processed products derived from food falling under the pesticide MRL legislation, the recalculated MRL, taking into account the appropriate processing factor should be reported (see Example 21).<br>For composite food the calculated MRL taking into account the composition of the product should be reported, as far as feasible (see Example 22). |
| MRLs set in Directives 2006/125/EC and 2006/141/EC                  | For baby food as defined in Directives 2006/125/EC and 2006/141/EC (coded with N028A in the data element progLegalRef) the baby food MRLs should be reported (i.e. the default MRL of 0.01 mg/kg or the specific MRLs set for a number of pesticides). Since the legal limits refer to the reconstituted products no recalculation of the legal limit considering the dilution factor derived from the label describing the preparation of the food ready for consumption would be required (see also 5.13. Result value (resVal, R.18), Section 6.3 Evaluation of the result (resEvaluation, R.30) and Section 7.1 Baby food)   |
| MRLs set in Directive 96/23/EC                                      | For animal products taken in the framework of Directive 96/23/EC (i.e. samples coded with N247A in the data element progLegalRef) the legal limits of Regulation (EU) No 37/2010 <sup>24</sup> applicable at the sampling date should be reported.   |
| National limits or legal limits set in other legislative frameworks | Samples not falling under any of the legislation mentioned above, any national limits or EU legal limits set in the framework of another legislation should be reported. The source of the legal limit can be further specified in the data element 6.2.   |

<sup>24</sup> Commission Regulation (EU) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. OJ L 15, 20.1.2010, p. 1–72.

**Example 21:** How to report the evaluation of the result for processed products (e.g. raisins)

| Data element         | Element value (catalogue)   | Code description                 | Note   |
|----------------------|---|----------------------------------|--|
| <b>prodCode</b>      | P0151010A (MATRIX)  | Table grapes                     | Grapes usually contain ca. 15% dry matter (DM) (information from public domain).   |
| <b>prodText</b>      | Raisins   |                                  |  |
| <b>paramCode</b>     | RF-0035-001-PPP (PARAM)   | Azoxystrobin                     |  |
| <b>prodTreat</b>     | T131A (PRODTR)  | Dehydration                      | See also Table 4.  |
| <b>moistPerc</b>     | 20  |                                  | Optional data element to report the moisture of the sample analysed; however, for dehydrated products it is an important information to calculate the MRL for processed products if no specific processing factor is available and should therefore be reported.<br>This information implies that the dry matter content (DM) of the sample is 80 %    |
| <b>exprRes</b>       | B001A (EXRES)   | Whole weight                     | Only code valid for the exprRes element.   |
| <b>resVal</b>        | 5   |                                  | Analytical result measured in raisins (without any recalculation)  |
| <b>resLegalLimit</b> | 10.67   |                                  | Calculated MRL for raisins, taking into account the processing factor for the pesticide (see resComm)  |
| <b>resEvaluation</b> | J002A (RESEVAL)   | ≤ maximum permissible quantities | The measured residue in the processed product (resVal) was below the calculated legal limit (resLegalLimit)  |
| <b>resComm</b>       | MRL recalculated from EU MRL for fresh table grapes (2 mg/kg):<br>$2 \text{ mg/kg} * 80\% / 15\% = 10.67 \text{ mg/kg}$ |                                  | The default processing factor for dried products is calculated as the ratio of the dry matter in the processed product and dry matter of the unprocessed product (e.g. DM raisins 80%/DM grapes 15% = 5.33).<br>$\text{MRL}_{\text{RAC}} * \text{PF} = \text{calculated MRL for processed product}$<br>$(2 \text{ mg/kg} * 5.33 = 10.67 \text{ g/kg})$ |

**Example 22:** How to report the evaluation of the result for a composite product (e.g. fruit juice mixture)

| Data element     | Element value (catalogue)  | Code description | Note        |
|------------------|--|------------------|-------------|
| <b>prodCode</b>  | PXXXXXA (MATRIX)   | Not in list      |             |
| <b>prodText</b>  | Fruit juice containing 30% orange juice, 20% grape juice, 10% apple juice, 10% pineapple juice and 30% water |                  |             |
| <b>paramCode</b> | RF-0014-001-PPP (PARAM)  |                  | Acetamiprid |

| Data element         | Element value (catalogue)   | Code description                 | Note   |
|----------------------|---|----------------------------------|--|
| <b>prodTreat</b>     | T103A (PRODTR)  | Juicing                          | See Table 4.   |
| <b>exprRes</b>       | B001A (EXRES)   | Whole weight                     | Only code valid for the exprRes element.   |
| <b>resVal</b>        | 1.2   |                                  | Analytical result for the juice analysed. Taking into account the default 50 % measurement uncertainty, the upper and the lower confidence interval are 1.8 and 0.6 mg/kg.   |
| <b>resLegalLimit</b> | 0.451   |                                  | Calculated MRL for the composite food product (see resComm)  |
| <b>resEvaluation</b> | J003A (RESEVAL)   | > maximum permissible quantities | The measured residue in the composite food product (resVal) clearly exceeded the calculated legal limit (resLegalLimit), even if the 50 % measurement uncertainty is taken into account (lower confidence interval of the resVal) (see also Figure 1).                                 |
| <b>resComm</b>       | MRL recalculated for the composite product from EU MRLs, taking into account the composition of the product is 0.451 mg/kg. |                                  | MRLs for acetamiprid for the individual components:<br>Orange: 0.9 mg/kg<br>Apples: 0.8 mg/kg<br>Grapes: 0.5 mg/kg<br>Pineapples: 0.01* mg/kg<br>0.9 mg/kg (orange) *0.3+0.5 mg/kg (grapes) *0.2+0.8 mg/kg (apples) *0.1+ 0.01mg/kg (pineapples)*0.1= 0.27+0.1+0.08+0.001=0.451 mg/kg. |

## 6.2. Type of legal limit (resLegalLimitType, R.29)

This data element is not mandatory. In the case of pesticide monitoring the code W002A (Maximum Residue Level (MRL)) from the LMTTYP catalogue would be expected to be the most frequently used code that should be used for samples taken in the of Regulation (EC) No 396/2005 (except feed and fish), but also for baby food samples and samples taken under Directive 96/23/EC (see also Section 3.13).

As alternative option for this data element, the code W990A (National or local limit) can be selected to indicate that the result was compared with a national legal limit. This value would however not be acceptable for food products/parameters falling under EU legislations (e.g. Regulation (EC) No 396/2005, see MatrixTool, or other sectorial legislation specifying legal limits).

Related data elements: 3.13 Programme legal reference (progLegalRef, S.32)

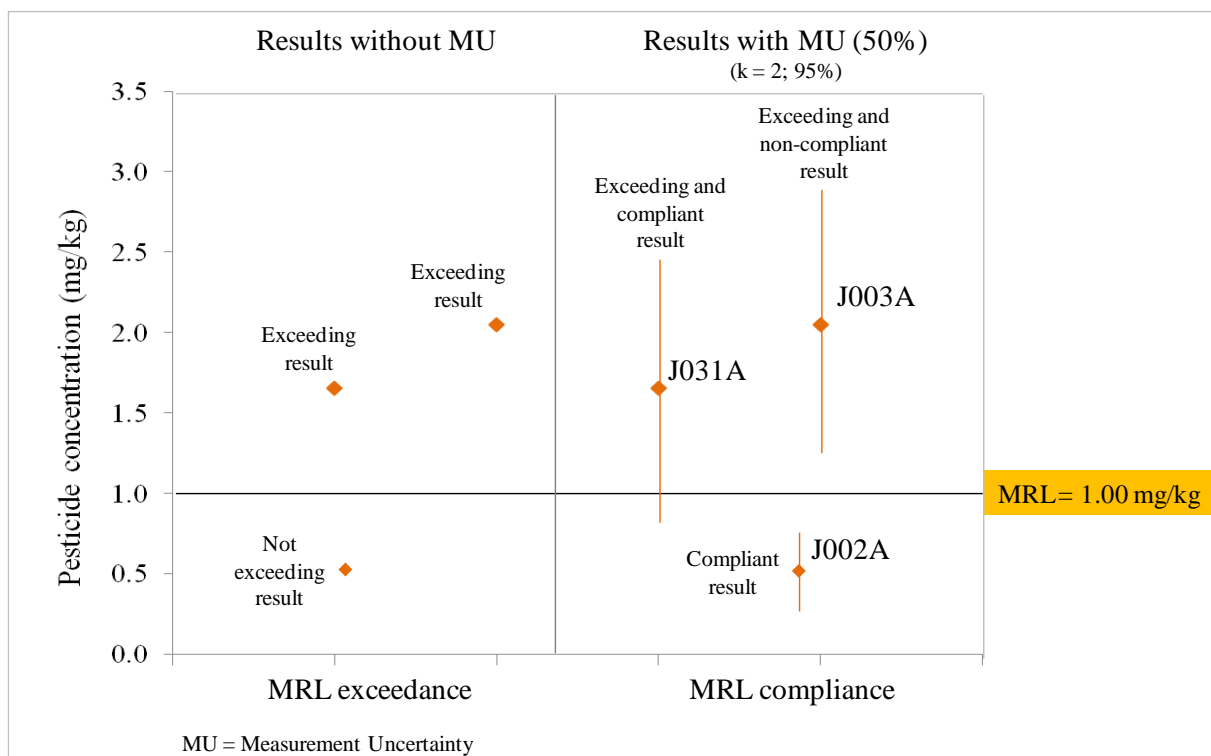
## 6.3. Evaluation of the result (resEvaluation, R.30)

This element is mandatory for the pesticide monitoring data collection; it should provide the judgement of the reporting country concluding whether the result reported in the field resVal was considered exceeding the legal limit that is applicable to the sample. The valid codes to be used are found in the catalogue RESEVAL.

The different options are explained in Table 16. In Figure 1 the different cases are illustrated graphically, while in Example 21 and Example 22 some practical examples for processed and composite food can be found.

**Table 16:** Codes to be used for describing MRL compliance of a result

| Element value | Description                              | Note   |
|---------------|--|--|
| <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 (i.e. the MRL reported in resLegalLimit).   |
| <b>J003A</b>  | > maximum permissible quantities         | This code has to be used where the result was found clearly exceeding the legal limit (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, e.g. <ul style="list-style-type: none"> <li>• for products for which no EU nor national MRLs are in place (e.g. feed, fish, composite food), or</li> <li>• for substances for which no EU or national MRLs are in place (e.g. synergists), or</li> <li>• for determinations that are labelled with P002A in the data element paramType, or</li> <li>• if the analytical method was not sensitive enough to check MRL compliance (LOQ&gt;MRL)</li> </ul> |

**Figure 1:** Graphical explanation on the different resEvaluation codes used to describe MRL compliance

Related data elements: 5.13 Result value (resVal, R.18), 6.1 Legal limit for the result (resLegalLimit, R.28)



## 6.4. Action taken (actTakenCode, R.31)

This data element is not mandatory (SSD catalogue ACTION). However, if any enforcement action was taken because of infringements of the legal limit, this information should be reported. This is in 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. Therefore these samples should not be taken into account for dietary exposure assessments since the results would lead to an overestimation of the actual exposure of EU consumers. Also for non-compliant samples produced within the EU territory it is important to understand which enforcement actions were triggered.

For this data element multiple codes can be reported to describe the actions taken (e.g. Rapid Alert Notification, lot recalled from the market and destruction of products). The codes from the ACTION catalogue should be linked using the \$ separator (e.g. R\$S\$E).

Related data element: 6.3 Evaluation of the result (resEvaluation, R.30)

## 6.5. Comment of the result (resComm, R.32)

This data element is not mandatory; however, it should be used to provide additional information related to the result or the enforcement actions taken, such as

- the processing factor (PF) applied to check MRL compliance for processed products (see also Table 15);
- the possible reasons for the observed MRL exceedance;
- whether the analytical measurement is compliant with the EU MRL, but since the use of the tested pesticide is not authorised in the country of origin of the sample the provisions of Regulation (EU) No 1107/2009 were violated;
- enforcement actions taken for organic samples that were compliant with the legal limit but which contained residues of pesticides not permitted for organic farming or
- Explanation how the legal limit for composite food has been calculated taking into account the MRLs for the individual components (see also Example 21 and Example 22).

Related data elements: 6.1 Legal limit for the result (resLegalLimit, R.28), 6.3 Evaluation of the result (resEvaluation, R.30)

## 7. Additional examples for special cases

In the previous sections the main focus was put on the description of samples taken in the framework of Article 29 and 30 of Regulation (EC) No 396/2005. Since reporting countries usually also report results of pesticide residues in samples that are not or not yet fully covered by this legislation (e.g. baby food, feed, fish) or results for substances covered by partially overlapping legislations (e.g. residues of veterinary medicinal products) or other substances of interest, such as biocides, safeners and synergists, specific guidance should be provided in this chapter for reporting these results to ensure that a harmonised approach is used.

### 7.1. Baby food

In Table 17 a complete list of all mandatory data elements can be found which describes for which codes specific considerations need to be taken into account for coding of baby food samples.



**Table 17:** SSD codes relevant reporting of results for baby food

| Mandatory data element | Element value (Code description)   | Comment  |
|------------------------|--|--|
| labSampCode            |  | No specific provisions/restrictions  |
| lang                   |  | No specific provisions/restrictions  |
| sampCountry            |  | No specific provisions/restrictions  |
| origCountry            |  | No specific provisions/restrictions  |
| prodCode               | PX100001A (Baby food for infants and young children) or PX100003A (Processed cereal-based baby foods (e.g. cereal and pastas to be reconstituted with milk or other liquids)) or PX100004A (Infant formulae) or PX100005A (Follow-on formulae) |  |
| prodText               | E.g. 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  |
| prodProdMeth           | Any value of Table 3   | 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                  |  | No specific provisions   |
| progLegalRef           | N028A (Samples of food products falling under Directives 2006/125/EC and 2006/141/EC)  | See Section 3.13 and Table 5   |
| progSampStrategy       | Any value of Table 6, considering the restrictions described.  | For baby food samples taken in the framework of the EU-coordinated programme, ST10A or ST20A are appropriate codes; for national programmes any code can be selected.  |
| progType               | Any value of Table 7   | No specific restrictions   |
| sampMethod             | Appropriate code of Table 9  | N014A (official control of feed) would not be an appropriate code  |
| sampPoint              | Appropriate code of Table 10   | No specific provisions/restrictions  |
| labCode                | Free text  | No specific provisions/restrictions  |
| labAccred              | Any value of Table 11  | No specific provisions/restrictions  |
| resultCode             | Free text  | No specific provisions/restrictions  |
| analysisY              | Year of analysis   | No specific provisions/restrictions  |
| paramCode              | Any code of the MatrixTool, TableBabyFood; In addition, a code from TableB of the MatrixTool can be selected to report components of a complex residue definition.   | 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 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 in TableBabyFood. 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 |

| Mandatory data element | Element value (Code description)  | Comment   |
|------------------------|---|---|
|                        |   | products other than milk, the residue definition for animal products should be selected.  |
| paramText              | Free text   | If paramCode RF-XXXX-XXX-XXX is selected, the paramText becomes mandatory to describe in more detail the nature of the product (see Section 5.6).   |
| paramType              | P005A (Full legal residue definition analysed) or where appropriate P004A (Sum based on a subset).<br>If a residue definition is classified as a complex residue definition, in addition, components of complex residue definitions can be reported in line with the paramCodes of TableB of the MatrixTool which have to be labelled with P002A (part of a sum). | The valid paramTypes for the specific paramCode can be found in the MatrixTool, TableBabyFood, column F and G, and in column J and K for residue definitions that changed during 2014.<br>In addition, reporting countries can report the components of complex residue definitions using P002A.  |
| anMethText             | Free text   | Mandatory only under certain conditions (see Section 5.8)   |
| accredProc             | Any value of Table 13   | No specific restrictions  |
| resUnit                | G061A (mg/kg)   | This is the only code acceptable for pesticide data submission  |
| resLOQ                 | Numerical value for LOQ of the method in the matrix analysed  | 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; a lower LOQ would be required for the following residue definitions - paramCodes:<br>Disulfoton (RD) - RF-0149-001-PPP<br>Fensulfothion - RF-0685-002-PPP<br>Fentin (RD) - RF-0687-001-PPP<br>Haloxfop (RD) - RF-0235-001-PPP or RF-0235-005-PPP<br>Heptachlor (RD) - RF-0236-001-PPP<br>Hexachlorobenzene - RF-0237-001-PPP<br>Nitrofen - RF-0311-001-PPP<br>Dimethoate/omethoate (RD) - RF-0139-001-PPP<br>Terbufos - RF-0412-002-PPP<br>Dieldrin (RD) - RF-0021-001-PPP<br>Endrin - RF-0156-001-PPP<br>Cadusafos - RF-0528-001-PPP<br>Demeton-S-methyl - RF-0594-002-PP<br>Oxydemeton-methyl (RD) - RF-0323-001-PPP<br>Ethoprophos - RF-0164-001-PPP<br>Fipronil (RD) - RF-0192-001-PPP<br>Propineb - RF-0359-001-PPP |
| resVal                 | Numerical value   | 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).  |
| resValRec              | Numerical value   | Mandatory only under certain conditions (see Section 5.14); percentage of recovery (e.g. 65 if recovery in method validation was 65 %)  |
| exprRes                | B001A   | Only option for pesticide data collection   |
| resType                | VAL or LOQ or BIN   | If the sample was analysed with a screening method and the pesticide was not detected, the code BIN should be selected.   |

| Mandatory data element | Element value (Code description)                           | Comment   |
|------------------------|--|---|
| resLegalLimit          | 0.01 or specific MRL for the paramCodes reported in resLOQ | 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 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). See also Section 6.1 |
| resLegalLimitType      | W002A (Maximum Residue Level (MRL))                        | See Section 6.2   |
| resEvaluation          | Any value of Table 16                                      | No specific provisions  |
| actTakenCode           | Any value of the ACTION catalogue                          | Also more than one code can be selected, if appropriate, using the \$ separator (see Section 6.4)   |
| resComm                | Free text  | No specific provisions  |

## 7.2. Feed and fish samples

For feed (crops exclusively used for animal feed purposes) and fish, harmonised EU MRLs are not yet established under Regulation (EC) No 396/2005. It should be highlighted that for feed product that were produced from products listed in Annex I of Regulation (EC) No 396/2005, the existing EU MRLs would apply, taking into account the appropriate processing factors.

For the most important data elements examples on the choice of the correct codes for these two food categories are outlined below.

**Table 18:** Specific codes recommended for reporting results on fish and animal feed

| Data element  | Element value (catalogue)  | Code description   | Note  |
|---------------|--|--|---|
| prodCode      | P1100000A  | Fish, fish products  | For feed produced from products that can be also used for food purposes (e.g. soya meal produced from soya beans), the corresponding code from the MATRIX catalogue should be used. |
|               | P1200000A (MATRIX)   | Crops exclusively used for animal feed                     |   |
| prodText      | Trout  |  | For describing the product analysed in more detail, the data element prodText shall be used.  |
|               | Wheat straw  |  |   |
| prodTreat     | Any code of the PRDTR catalogue  |  | No restrictions   |
| progLegalRef  | N027A (catalogue from SSD2)  | Samples taken under Regulation (EC) No 396/2005            | Although no legal limits are established yet for feed, the general provisions of Article 26 of Regulation (EC) No 396/2005 on official controls apply also for feed.                |
| sampMethod    | Fish: appropriate code from SAMPD catalogue  | According to Reg. 152/2009/EC for official control of feed | Lacking the detailed provisions for feed under Regulation (EC) No 396/2005, the generic sampling provisions for feed would be applicable.   |
|               | Feed: N014A (SAMPMD)   |  |   |
| paramCode     | Any code of the MatrixTool, TableA or TableB can be selected to report results of the analysis |  | Since there are no official residue definitions for feed, the reporting country is free to decide which parameter to analyse.   |
| paramType     | P005A, P004A or P002A  |  | No restrictions   |
| resLegalLimit | Numerical value or blank   |  | National legal limit, if applicable   |

| Data element      | Element value (catalogue) | Code description        | Note   |
|-------------------|---------------------------|-------------------------|--|
| resLegalLimitType | W990A (LMTTYP)            | National or local limit | Since EU MRL are not yet in place, only national limits can be used for this data element. |

### 7.3. Veterinary medicine residues

A number of pesticides are also used as veterinary medicines. Legal limits on residues of these dual use substances in food of animal origin are set under the pesticide MRL legislation, but also in Regulation (EC) No 37/2010.<sup>25</sup> Member States perform controls of food of animal origin under different legal frameworks. In this section, EFSA provides guidance how to report the results of the analysis under the pesticide residue data collection.

**Table 19:** Codes recommended for reporting results of residues of pharmacologically active substances covered by Regulation (EC) No 37/2010 and Regulation (EC) No 396/2005 in the framework of the pesticide monitoring data collection

| Element value    | Element value (catalogue)   | Code description   | Note  |
|------------------|---|--------------------|---|
| prodCode         | Appropriate code for food of animal origin of MATRIX catalogue  |                    |   |
| prodText         | Free text   |                    | Any further description of the product analysed.  |
| progLegalRef     | N247A (catalogue of SSD2)   | Directive 96/23/EC | see Table 5   |
| progSampStrategy | Any value of Table 6, considering the restrictions described.   |                    | As appropriate  |
| progType         | Any value of Table 7  |                    | No specific restrictions  |
| sampMethod       | N010A (SAMPMD)  |                    | Appropriate code for monitoring in the framework of Directive 96/23/EC (see Table 9)  |
| paramCode        | The relevant code for the residue definition in the MatrixTool, TableA for the animal product analysed; in addition, paramCode from TableB to report individual component(s). |                    | If no appropriate code reflecting the residue definition established in the framework of Directive 96/23/EC is available in the MatrixTool, the result should not be reported to EFSA in the framework of the pesticide monitoring data collection. The following pesticides are covered by both legislation:<br>Amitraz, cyfluthrin, diazinon, phoxim, thiabendazole, cypermethrin (a separate RD for alpha-cypermethrin is in place for residues of veterinary medicinal products), deltamethrin, fenvalerate, permethrin, abamectin(*), cyromazine, Diflubenzuron(*), teflubenzuron, cyhalothrin, emamectin (for the substances labelled with (*)) the residue definitions set under the two pieces of legislation are different). |

<sup>25</sup> Commission Regulation (EC) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. OJ L 15, 20.1.2010, p. 1–72.

| Element value     | Element value (catalogue)  | Code description | Note  |
|-------------------|--|------------------|---|
| paramType         | P005A or P004A as appropriate;<br>In addition, P002A for reporting part of a complex residue definition. |                  | For the substances with different residue definitions set in Regulation (EC) No 396/52005 and Directive 96/23/EC, (i.e. diflubenzuron and abamectin): P004A if the sample was analysed in accordance with the legal residue definition set under Directive 96/23/EC which do not comprise all the metabolites that were included in the residue definition of Regulation (EC) No 396/2005 |
| resLegalLimit     | Numerical field  |                  | The limits set under Directive 96/23/EC (if the sample was taken under the legal framework of Regulation 396/2005 – progLegalRef N247A)   |
| resLegalLimitType | W002A (Maximum Residue Level (MRL))  |                  | See Section 6.2   |
| exprRes           | B001A (EXRES)  | Whole weight     | The legislation applicable for residue of veterinary medicinal products also requires that the results are expressed on a whole weight basis.   |
| resComm           | Any further information  |                  | Additional information, e.g. clarifications on the legal limit used to check compliance if the legal limits set in the two pieces of legislation (see introduction) were different.   |

More detailed provisions for reporting results in the framework of Council Directive 96/23/EC have been recently published by EFSA (EFSA, 2015c).

#### 7.4. Synergists and safeners

According to the current European legislation, synergists and safeners are not covered by MRL legislation (Regulation (EC) No 396/2005). However, since national legal limits may be applicable Member States are analysing samples for the presence of these compounds.

To submit results of these analyses in the framework of the pesticide data submission to EFSA, the recommendations outlined in Table 20 should be taken into account. For data elements not mentioned in this table, the general provisions described in Sections 3, 4, 5 and 6 are applicable.

It is noted that as long as no harmonised MRL legislation is established for safeners and synergists, EFSA will exclude these results for the data analysis presented in the Annual Reports on Pesticide Residues.

**Table 20:** Codes recommended for reporting results of samples analysed for safeners and synergists

| Element value | Element value (catalogue) | Code description            | Note   |
|---------------|---------------------------|-----------------------------|--|
| progLegalRef  | N018A (SSD2 catalogue)    | Regulation (EC) No 882/2004 | Since none of the alternative legislation recommended for the coding of this data element is applicable, the code for Regulation 882/2004 should be selected (see Table 5) |

| Element value            | Element value (catalogue)   | Code description  | Note  |
|--------------------------|---|---|---|
| <b>paramCode</b>         | RF-0492-001-PPP<br>RF-0567-001-PPP<br>RF-0568-001-PPP<br>RF-0601-001-PPP<br>RF-1069-001-PPP<br>RF-0673-001-PPP<br>RF-0674-001-PPP<br>RF-0716-001-PPP<br>RF-0722-001-PPP<br>RF-0728-001-PPP<br>RF-0765-001-PPP<br>RF-0777-001-PPP<br>RF-00000026-PAR<br>RF-1037-001-PPP<br>RF-0848-001-PPP<br>RF-0889-001-PPP<br>RF-XXXX-XXX-XXX | Benoxacor<br>Cloquintocet<br>Cloquintocet-Mexyl<br>Dichlormid<br>Fenchlorazole<br>Fenchlorazol-Ethyl<br>Fencloirim<br>Flurazole<br>Fluxofenim<br>Furilazole<br>Isoxadifen-ethyl<br>Mefenpyr<br>Mefenpyr-diethyl<br>Oxabetrinil<br>Piperonyl Butoxide<br>S421<br>Not in list | ParamCodes currently available for the safeners and synergists. If the code for "Not in list" is selected, the field paramText becomes mandatory. |
| <b>paramType</b>         | P002A<br>(PARTYP)   | Part of a sum   | It is recommended to label safeners and synergists with P002A to make clear that there are no EU MRLs with EU agreed legal residue definitions.   |
| <b>resLegalLimitType</b> | W990A<br>(LMTTYP)   | National or local limit (if applicable)   | EU MRL are not yet in place. If national MRLs are applicable, the code W990A should be selected.  |
| <b>resLegalLimit</b>     | Numerical value for national legal limit or blank   |   | If national legal limits are in place specifically for safeners and synergists, please report them in the data element resLegalLimit.             |

## References

- EFSA (European Food Safety Authority), 2010. Standard sample description for food and feed. EFSA Journal 2010; 8(1):1457, 54 pp. doi:10.2903/j.efsa.2010.1457
- EFSA (European Food Safety Authority), 2014a. Use of the EFSA Standard Sample Description for the reporting of data on the control of pesticide residues in food and feed according to Regulation (EC) No 396/2005 (2013 Data Collection). EFSA Journal 2014;12(1):3545 60 pp. doi:10.2903/j.efsa.2014.3545
- EFSA (European Food Safety Authority), 2014b. Guidance on the data exchange version 2.0. EFSA Journal 2014;12(12):3945, 173 pp. doi:10.2903/j.efsa.2014.3945
- EFSA (European Food Safety Authority), 2015a. The EFSA Data Warehouse access rules. EFSA supporting publication 2015:EN-76, 18 pp.
- EFSA (European Food Safety Authority), 2015b. The 2013 European Union report on pesticide residues in food. EFSA Journal 2015;13(3):4038, 169 pp, doi:10.2903/j.efsa.2015.4105
- EFSA (European Food Safety Authority), 2015c. Guidelines for reporting data on residues of veterinary medicinal products. EFSA supporting publication 2015:EN-783. 77 pp.
- European Commission, 2013. Guidance document on analytical quality control and validation procedures for pesticide residues analysis in food and feed. SANCO/12571/2013.

## Abbreviations

|       |   |
|-------|---|
| CAS   | Chemical Abstracts Service                        |
| DCF   | Data Collection Framework                         |
| DM    | Dry matter content                                |
| EEA   | European Economic Area                            |
| EURL  | European Reference Laboratory                     |
| EU    | European Union                                    |
| ISO   | International Organisation for Standardisation    |
| IUPAC | International Union of Pure and Applied Chemistry |
| LOD   | Analytical Limit of Determination                 |
| LOQ   | Analytical Limit of Quantification                |
| MRL   | Maximum Residue Level                             |
| PF    | Processing factor                                 |
| RASFF | Rapid Alert System for Food and Feed              |
| RD    | Residue definition                                |
| SSD   | Standard Sample Description (ver. 1)              |
| VAL   | Numerical value                                   |



## Appendix A – EU-coordinated monitoring programme

In the table below the food commodities included in the 2014 EU-coordinated monitoring programme are listed along with the codes for the product code, product treatment, sampling strategy and type of sampling programme.

| Food product       | prodCode (MATRIX) | prodTreat (PRODTR) | progLegalRef | progSamp Strategy (SAMPSTR) | progType (SRCTYP) | Note   |
|--------------------|-------------------|--------------------|--------------|-----------------------------|-------------------|--|
| Beans with pod     | P0260010A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Carrots            | P0213020A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    | The product can be specified in more detail in the data element prodText (e.g. baby carrots).  |
| Cucumbers          | P0232010A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Infant formulae    | PX100004A         | T100A              | N028A        | ST10A or ST20A              | K009A or K018A    | The product can be described in more detail in the data element prodText.<br>See also Section 5.13 Result value (resVal, R.18) and Section 7.1 |
| Follow-on formulae | PX100005A         | T100A              | N028A        | ST10A or ST20A              | K009A or K018A    | The product can be specified in more detail in the data element prodText.<br>See also Section 5.13 Result value (resVal, R.18) and Section 7.1 |
| Liver (bovine)     | P1012030A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Liver (sheep)      | P1013030A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Liver (goat)       | P1014030A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Liver (swine)      | P1011030A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Liver (poultry)    | P1016030A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Mandarins          | P0110050A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Oranges            | P0110020A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Pears              | P0130020A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Poultry muscle     | P1016010B         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    | See also information in Table 1 and Example 17.  |
| Poultry fat        | P1016020A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    | See Example 18   |
| Potatoes           | P0211000A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    | In prodText the product analysed can be described in more detail (e.g. early potatoes or potatoes washed before packaging).                    |
| Rice               | P0500060A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    | According to the EUCP the unprocessed product (brown rice) shall be analysed (T999A).  |
| Spinach            | P0252010A         | T999A or T998A     | N027A        | ST10A or ST20A              | K009A or K018A    |  |
| Wheat flour        | P0500090A         | T111A or T112A     | N027A        | ST10A or ST20A              | K009A or K018A    | See also Table 4: Codes to be used to describe processed products (PRODTR catalogue)   |

## Appendix B – 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 Regulation (EC) No 669/2009 are listed along with the Product code (prodCode, S.13), Country of origin of the product (origCountry, S.06) and Product treatment (prodTreat, S.17).

| Food  | prodCode (MATRIX) | Country of origin  | origCountry (CTRY) | Product treatment    | prodTreat (PRODTR) |
|---|-------------------|--------------------|--------------------|----------------------|--------------------|
| Aubergines                                  | P0231030A         | Cambodia           | KH                 | Unprocessed/Freezing | T999A/T998A        |
| Aubergines                                  | P0231030A         | Dominican Republic | DO                 | Unprocessed/Freezing | T999A/T998A        |
| Aubergines                                  | P0231030A         | Thailand           | TH                 | Unprocessed/Freezing | T999A/T998A        |
| Basil (holy, sweet)                         | P0256080A         | Thailand           | TH                 | Unprocessed          | T999A              |
| Basil (holy, sweet)                         | P0256080A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Beans with pods (unshelled)                 | P0260010A         | Kenya              | KE                 | Unprocessed          | T999A              |
| Bitter melon ( <i>Mormodica charantia</i> ) | P0232030A         | Dominican Republic | DO                 | Unprocessed/Freezing | T999A/T998A        |
| Chinese broccoli <sup>26</sup>              | P0241010A         | China              | CH                 | Unprocessed          | T999A              |
| Chinese celery                              | P0256030A         | Cambodia           | KH                 | Unprocessed          | T999A              |
| Coriander leaves                            | P0256030A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Coriander leaves                            | P0256030A         | Thailand           | TH                 | Unprocessed          | T999A              |
| Dragon fruit                                | P0163070A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Dried beans                                 | P0300010A         | Nigeria            | NG                 | Unprocessed          | T999A              |
| Mint  | P0256080A         | Morocco            | MA                 | Unprocessed          | T999A              |
| Mint  | P0256080A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Okra  | P0231040A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Oranges (fresh)                             | P0110020A         | Egypt              | EG                 | Unprocessed          | T999A              |
| Oranges (dried)                             | P0110020A         | Egypt              | EG                 | Dehydration          | T131A              |
| Parsley                                     | P0256040A         | Vietnam            | VN                 | Unprocessed          | T999A              |
| Peas with pods (unshelled)                  | P0260030A         | Kenya              | KE                 | Unprocessed          | T999A              |
| Peppers ( <i>Capsicum spp.</i> )            | P0231020A         | Dominican Republic | DO                 | Unprocessed/Freezing | T999A/T998A        |
| Peppers ( <i>Capsicum spp.</i> )            | P0231020A         | Egypt              | EG                 | Unprocessed/Freezing | T999A/T998A        |
| Peppers ( <i>Capsicum spp.</i> )            | P0231020A         | Vietnam            | VN                 | Unprocessed/Freezing | T999A/T998A        |
| Peppers ( <i>Capsicum spp.</i> )            | P0231020A         | Thailand           | TH                 | Unprocessed/Freezing | T999A/T998A        |
| Peppers ( <i>Capsicum spp.</i> )            | P0231020A         | Turkey             | TR                 | Unprocessed/Freezing | T999A/T998A        |

<sup>26</sup> In the MRL food classification applicable for 2014 (Regulation (EU) No 212/2013), the product listed in the regulations on import control (Species of *Brassica oleracea* L. convar. botrytis (L) Alef var. italica Plenck, cultivar alboglabra. Also known as "Kai Lan", "Gai Lan", "Gailan", "Kailan", "Chinese bare Jielan") was classified as belonging to broccoli (0241010). It is noted that in the most recent version of the food classification the crop was moved to a different group. However, for 2014 the results should be reported with the prodCode for broccoli.

| Food  | prodCode (MATRIX) | Country of origin  | origCountry (CTRY) | Product treatment     | prodTreat (PRODTR) |
|---|-------------------|--------------------|--------------------|-----------------------|--------------------|
| Pomelos   | P0110010A         | China              | CN                 | Unprocessed/Freezing  | T999A/T998A        |
| Strawberries  | P0152000A         | Egypt              | EG                 | Unprocessed           | T999A              |
| Table grapes  | P0151010A         | Peru               | PE                 | Unprocessed           | T999A              |
| Tea, whether or not flavoured   | P0610000A         | China              | CN                 | Unprocessed           | T999A              |
| Vine leaves   | P0253000A         | Turkey             | TR                 | Unprocessed/Processed | T999A/T100A        |
| Yardlong beans ( <i>Vigna unguiculata</i> spp. <i>sesquipedalis</i> ) | P0260010A         | Cambodia           | KH                 | Unprocessed/Freezing  | T999A/T998A        |
| Yardlong beans ( <i>Vigna unguiculata</i> spp. <i>sesquipedalis</i> ) | P0260010A         | Dominican Republic | DO                 | Unprocessed/Freezing  | T999A/T998A        |
| Yardlong beans ( <i>Vigna unguiculata</i> spp. <i>sesquipedalis</i> ) | P0260010A         | Thailand           | TH                 | Unprocessed/Freezing  | T999A/T998A        |

## Appendix C – Business and validation rules for pesticides monitoring<sup>27</sup>

| Element code | Element name    | Rule  | Error type <sup>28</sup> | Note  |
|--------------|-----------------|---|--------------------------|---|
| L.1          | labCode         | The field labCode is mandatory for the data collection on pesticide monitoring  | E                        |   |
| L.2          | labAccred       | The only valid labAccred codes for the Pesticides data collections are L001A and L003A  | E                        |   |
| L.2          | progLegalRef    | The only valid progLegalRef for the Pesticides data collections are N027A, N028A, N247A and N018A                                     | E                        |   |
| L.3          | labCountry      | The terms EU, XD, XE are not valid Country codes for the pesticides data collection   | E                        |   |
| O.2          | localOrgCountry | The terms EU, XD, XE are not valid Country codes for the pesticides data collection   | E                        |   |
| R.02         | analysisY       | "Year of analysis" has to be less than or equal to the current year   | E                        | Analysis year cannot be greater than the current year   |
| R.03         | analysisM       | "Month of analysis" has to be between 1 and 12  | E                        | Analysis month must be between 1 and 12   |
| R.03         | analysisM       | "Month of analysis" has to be filled in if "Day of analysis" is filled in   | E                        | Analysis month must be completed if analysis day is completed   |
| R.03         | analysisM       | The partial date analysisM/analysisY must be less or equal to the current partial date M/Y  | E                        | The combination of analysis month and analysis year must not be greater than the current month and year |
| R.04         | analysisD       | "Day of analysis" has to be between 1 and 31  | E                        |   |
| R.04         | analysisD       | The date analysisD/analysisM/analysisY must be a valid date   | E                        | The combination of analysis day, month and year must be a valid date                                    |
| R.04         | analysisD       | The date analysisD/analysisM/analysisY must be less or equal to the current date D/M/Y  | E                        | The combination of analysis day, month and year must not be greater than the current date               |
| R.06         | paramCode       | Where paramCode <> "RF-XXXX-XXX-XXX" (Not in list) then (paramCode, labSampCode, labSubSampCode) must be unique for a data provider ; | E                        | When parameter text not equals 'Not in list' then each paramCode should be unique for that labSampCode  |
| R.07         | paramText       | Where paramCode = "RF-XXXX-XXX-XXX" (Not in list) then paramText must be provided   | E                        | Parameter text should be completed if code is RF-XXXX-XXX-XXX   |
| R.08         | paramType       | The only valid Parameter Type (paramType) codes for the Pesticides data collections are "P002A" "P004A" "P005A"                       | E                        |   |
| R.11         | anMethText      | If anMethCode is "F001A" (Classification not possible) then anMethText must be provided   | E                        | Analytical method text should be completed if method code is F001A                                      |

<sup>27</sup> The table below comprises a comprehensive list of general business and validation rules for all food domains, and the specific rules for the pesticide monitoring. They are applied either when the data are uploaded on the DCF or during the preparation of the national validation report.

<sup>28</sup> Type of error messages; E=Error, W=warning.

| Element code | Element name      | Rule   | Error type <sup>28</sup> | Note  |
|--------------|-------------------|--|--------------------------|---|
| R.12         | accredProc        | The only valid accreditation procedure for the analytical method (accredProc) codes for the Pesticides data collections are "V001A" "V005A" "V999A"                    | E                        |   |
| R.12         | resEvaluation     | The only valid codes for the evaluation of results (resEvaluation) for the Pesticides data collections are "J002A" "J003A" "J031A" "J029A"                             | E                        |   |
| R.13         | resUnit           | If at least one of resLOD, resLOQ, CCalpha, CCbeta, resVal, resValUncertSD, resValUncert, resLegallimit is provided then resUnit must be provided.                     | E                        | If a numeric field is reported the unit should be reported                                  |
| R.13         | resUnit           | For pesticides monitoring, only "Mg/kg" is accepted as code for resUnit  | E                        | See also Section 5.10   |
| R.13         | resUnit           | If "Type of result" is different from "BIN" then "Result unit" must be specified   | E                        | For results other than qualitative values the result unit must be reported                  |
| R.15         | resLOQ            | "Result LOQ" has to be filled in if "Type of result" is equal to "LOQ".  | E                        | The result LOQ must be completed if the result type is LOQ                                  |
| R.15         | resLOQ            | The field resLOQ is mandatory for the data collection on pesticides residues   | E                        |   |
| R.15         | resLOQ            | "Result LOQ" must be greater than 0  | W                        | If the LOQ is reported, it should be greater than 0   |
| R.18         | resVal            | ResVal must be filled in if ResType is equal to "VAL"  | E                        | The result value must be completed if the result type is VAL                                |
| R.18         | resVal            | ResVal must be greater than 0  | W                        | If the result value is reported it should be greater than 0                                 |
| R.19         | resValRec         | resValRec must be greater than 0   | W                        | If result value recovery is reported it should be greater than 0                            |
| R.21         | resValUncertSD    | resValUncertSD must be greater than 0  | W                        | If result value uncertainty standard deviation is reported it should be greater than 0      |
| R.22         | resValUncert      | resValUncert must be greater than 0  | W                        | If result value uncertainty is reported it should be greater than 0                         |
| R.23         | moistPerc         | MoistPerc has to be between 0 and 100.   | E                        | The percentage moisture should be between 0 and 100   |
| R.24         | fatPerc           | FatPerc has to be between 0 and 100.   | E                        | The percentage fat should be between 0 and 100  |
| R.24         | fatPerc           | If the fat percentage in the milk samples (P1020000A, P1020010A, P1020020, P1020030A, P1020040, P1020990A) is not reported, EFSA will assume a fat content equal to 4% | W                        | See also Section 5.18   |
| R.25         | exprRes           | exprRes should be B001A  | E                        | Only Whole weight (B001A) should be reported as expression of result (exprRes)              |
| R.27         | resType           | Only LOQ or VAL or BIN can be reported   | E                        | For pesticide data collection these three options are valid                                 |
| R.27         | resType           | If resEvaluation = J003A or resEvaluation = J031A, then resType must be VAL  | E                        | If the result is not compliant with the legal limit, then the result must be numeric (=VAL) |
| R.29         | ResLegalLimitType | If resLegalLimit is provided then the resLegalLimitType must be provided   | W                        | The type of legal limit must be indicated in the legal limit type                           |

| Element code | Element name      | Rule   | Error type <sup>28</sup> | Note   |
|--------------|-------------------|--|--------------------------|--|
| <b>R.29</b>  | ResLegalLimitType | ResLegalLimitType should be W002A or W990A   | W                        | Only EU MRL or national/local limits should be reported in the resLegalLimitType   |
| <b>R.30</b>  | resVal            | Where resEvaluation is either "J003A" or "J031A", resVal must be greater than resLegalLimit                                  | E                        |  |
| <b>R.30</b>  | resVal            | Where resEvaluation is "J002A" then resVal must be less or equal to resLegalLimit  | E                        |  |
| <b>R.30</b>  | resEvaluation     | The field resEvaluation is mandatory for the data collection on pesticide residues   | E                        | The field resEvaluation is mandatory for the data collection on pesticide residues   |
| <b>R.31</b>  | actTakenCode      | Where resEvaluation = "J003A" (> maximum permissible quantities (Non-compliant result)) than actTakenCode should be provided | W                        | For not compliant results the action taken code should be completed  |
| <b>S.01</b>  | labSampCode       | For S.03 - S.39: all values in each data elements must be equal for all records with same labSampCode                        | E                        | Sample descriptors are not identical for all records with the same labSampCode   |
| <b>S.04</b>  | sampCountry       | The terms AA,EU,XC,XD,XE,XX are not valid Country codes for the pesticides data collection                                   | E                        |  |
| <b>S.05</b>  | sampArea          | The "area of sampling" reported must be included in the country reported in "Country of sampling"                            | E                        | The sampling area must be within the sampling country  |
| <b>S.06</b>  | origCountry       | The terms EU, XD, XE are not valid Country codes for the pesticides data collection  | E                        |  |
| <b>S.07</b>  | origArea          | The "area of origin" reported must be included in the country reported in "Country of origin of the product"                 | E                        | The area of origin must be within the country of origin.   |
| <b>S.10</b>  | procCountry       | The terms EU, XD, XE are not valid Country codes for the pesticides data collection  | E                        |  |
| <b>S.11</b>  | procArea          | The "Area of processing" reported must be included in the country reported in "Country of processing"                        | E                        | The processing area must be within the processing country  |
| <b>S.13</b>  | prodCode          | The MATRIX codes P1011010A, P1012010A, P1015010A, P1013010A, P1014010A, P1016010A, P1017010A are obsolete for reporting meat | E                        | 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 |
| <b>S.14</b>  | prodText          | If "Product code" is equal to "XXXXXXA" (not in list) then prodText must be provided   | E                        | Product text should be completed if code is XXXXXA   |
| <b>S.15</b>  | prodProdMeth      | The field prodProdMeth is mandatory for the data collection on pesticide residues  | E                        |  |
| <b>S.15</b>  | prodProdMeth      | The only valid product method (prodProdMeth) codes for the Pesticides data collections are "PD07A" "PD09A" "PD12A" "Z0215"   | E                        |  |
| <b>S.17</b>  | prodTreat         | Product treatment cannot be T899A (Unknown)  | E                        |  |

| Element code | Element name | Rule   | Error type <sup>28</sup> | Note  |
|--------------|--------------|--|--------------------------|---|
| <b>S.17</b>  | prodTreat    | If a baby food prodCode is reported, the only valid treatment code is T100A  | E                        | If the Matrix reported is a Baby food, the only valid product treatment is "Processed" (T100A) for the pesticides data collection   |
| <b>S.17</b>  | prodTreat    | For pesticide monitoring data a product treatment code (prodTreat) that is not among those recommended in the guidance triggers a warning message. | W                        | EFSA recommends using the codes in Table 4.   |
| <b>S.17</b>  | prodTreat    | If a prodCode for animal milk is reported, the only valid treatments code are T131A, T134A, T150A or T999A   | E                        | If the Matrix reported is milk of animal origin, the only valid product treatments are "Milk pasteurisation" (T150A), "Churning" (T134A), "Dehydration" (T131A) or "Unprocessed" (T999A) for the pesticides data collection |
| <b>S.22</b>  | prodY        | "Year of production" has to be less or equal to the current year   | E                        | Production year cannot be greater than the current year   |
| <b>S.22</b>  | prodY        | "Year of production" must be less than or equal to the "Year of expiry"  | E                        | Production year cannot be greater than expiry year  |
| <b>S.22</b>  | prodY        | "Year of production must be less than or equal to "Year of sampling  | E                        | Production year cannot be greater than the year of sampling   |
| <b>S.22</b>  | prodY        | "Year of production must be less than or equal to "Year of analysis"   | E                        | Production year cannot be greater than the year of analysis   |
| <b>S.23</b>  | prodM        | "Month of production" has to be between 1 and 12   | E                        | Production month must be between 1 and 12   |
| <b>S.23</b>  | prodM        | "Month of Production" has to be filled in if "Day of production" is filled in  | E                        | Production month must be completed if production day is completed   |
| <b>S.23</b>  | prodM        | The partial date prodM/prodY must be less or equal to the current partial date M/Y.  | E                        | The combination of production month and production year must be less than the current month and year  |
| <b>S.23</b>  | prodM        | The partial date prodM/prodY must be less or equal to expiryM/expiryY.   | E                        | The combination of production month and production year must be less than the expiry month and year   |
| <b>S.23</b>  | prodM        | The partial date prodM/prodY must be less or equal to sampM/sampY.   | E                        | The combination of production month and production year must be less than the sample month and year   |
| <b>S.23</b>  | prodM        | The partial date prodM/prodY must be less than or equal to analysisM/analysisY   | E                        | The combination of production month and production year must be less than the analysis month and year   |
| <b>S.24</b>  | prodD        | "Day of production" has to be between 1 and 31   | E                        | Production day must be between 1 and 31   |
| <b>S.24</b>  | prodD        | The date prodD/prodM/prodY must be a valid date  | E                        | The combination of production day, month and year must be a valid date  |
| <b>S.24</b>  | prodD        | The date prodD/prodM/prodY must be less or equal to the current date D/M/Y.  | E                        | The combination of production day, month and year must be less than the current date  |
| <b>S.24</b>  | prodD        | The date prodD/prodM/prodY must be less than expiryD/expiryM/expiryY.  | E                        | The combination of production day, month and year must be less than the expiry date   |
| <b>S.24</b>  | prodD        | The date prodD/prodM/prodY must be less than sampD/sampM/sampY.  | E                        | The combination of production day, month and year must be less than the sample date   |



| Element code          | Element name          | Rule  | Error type <sup>28</sup> | Note   |
|-----------------------|-----------------------|---|--------------------------|--|
| <b>S.24</b>           | prodD                 | The date prodD/prodM/prodY must be less than analysisD/analysisM/analysisY  | E                        | The combination of production day, month and year must be less than the analysis date  |
| <b>S.26</b>           | expiryM               | "Month of expiry" has to be between 1 and 12  | E                        | Expiry month must be between 1 and 12  |
| <b>S.26</b>           | expiryM               | "Month of expiry" has to be filled in if "Day of expiry" is filled in   | E                        | Expiry month must be completed if expiry day is completed  |
| <b>S.27</b>           | expiryD               | "Day of expiry" has to be between 1 and 31  | E                        | Expiry day must be between 1 and 31  |
| <b>S.27</b>           | expiryD               | The date prodD/prodM/prodY must be a valid date   | E                        | The combination of expiry day, month and year must be a valid date   |
| <b>S.28</b>           | sampY                 | "Year of sampling" must be less or equal to the current year  | E                        | Sample year cannot be greater than the current year  |
| <b>S.28</b>           | sampY                 | "year of sampling" must be less than or equal to "year of analysis"   | E                        | Sample year cannot be greater than the analysis year   |
| <b>S.29</b>           | sampM                 | "Month of sampling" has to be between 1 and 12  | E                        | Sample month must be between 1 and 12  |
| <b>S.29</b>           | sampM                 | "Month of sampling" has to be filled in if "Day of sampling" is filled in   | E                        | Sample month must be completed if sample day is completed  |
| <b>S.29</b>           | sampM                 | The partial date sampM/sampY must be less or equal to the current partial date M/Y  | E                        | The combination of sample month and sample year must be less than the current month and year   |
| <b>S.29</b>           | sampM                 | The partial date sampM/sampY must be less or equal to the partial date analysisM/analysisY  | E                        | The combination of sample month and sample year must be less than the analysis month and year  |
| <b>S.30</b>           | sampD                 | "Day of sampling" has to be between 1 and 31  | E                        | Sample day must be between 1 and 31  |
| <b>S.30</b>           | sampD                 | The date sampD/sampM/sampY must be a valid date   | E                        | The combination of sample day, month and year must be a valid date   |
| <b>S.30</b>           | sampD                 | The date sampD/sampM/sampY must be less or equal to the current date D/M/Y  | E                        | The combination of sample day, month and year must be less than the current date   |
| <b>S.30</b>           | sampD                 | The date sampD/sampM/sampY must be less or equal to the date analysisD/analysisM/analysisY  | E                        | The combination of sample day, month and year must be less than the analysis date  |
| <b>S.32</b>           | progLegalReference    | For pesticide data collection, only the following codes can be used: N027A, N028A, N247A and N018A                                | E                        | See also 3.13 Programme legal reference (progLegalRef, S.32)   |
| <b>S.32/S.33/S.34</b> | Combined SamplingInfo | For pesticides only certain combinations of codes for progType, progLegalRef and progSampStrategy are accepted                    | E                        | For pesticides the only combinations of codes for progType, progLegalRef and progSampStrategy are reported in Table 8  |
| <b>S.34</b>           | Combined Reg669Info   | For samples coded with K019A as progType, a valid combination of prodCode, origCountry and prodTreat should be reported           | E                        | The combinations of codes for products/country of origin/product treatment that were covered by provisions of Regulation 669/2009 are listed in Appendix B –Food to be analysed according to Regulation (EC) No 669/2009 |
| <b>S.35</b>           | sampMethod            | The only valid sampling method (sampMethod) codes for the Pesticides data collections are "N009A" "N014A" "N010A" "N001A" "N008A" | E                        | The only valid sampling method (sampMethod) codes for the Pesticides data collections are "N009A" "N014A" "N010A" "N001A" "N008A"  |
| <b>S.38</b>           | lotSizeUnit           | If the lot size is provided the lot size unit must be provided  | E                        | Lot size unit must be reported when lot size is reported   |

## Annex A – MatrixTool

The MatrixTool is an Excel file which has been developed by EFSA to facilitate the correct coding of the results to be reported in SSD1 format for the 2014 pesticide monitoring data collection. The tool should help to avoid mistakes regarding the selection of paramCodes not reflecting the valid legal residue definitions established for the different food products. In fact, the tool defines the valid paramCode for each pesticide/crop combination (paramCode/prodCode). The selection of the correct paramCode is of particular relevance for pesticides where different residue definitions apply for different food products. In addition, the tool provides the valid paramType codes for the prodCode/paramCode combinations.

### Where is the MatrixTool available?

The Excel file is available on the EFSA Data Management System under the following link: <https://dms.efsa.europa.eu/otcs/cs.exe?func=ll&objaction=overview&objid=14271710>

### What kind of information can be found in the MatrixTool?

The MatrixTool contains three sheets: TableA, TableB and TableBabyFood.

#### TableA

This table comprises the following columns with the following information:

- **prodCode** and **prodName**. These columns contain the food codes and the food names as defined in Annex I of Regulation (EC) No 396/2005 applicable for the 2014 data collection<sup>29</sup>. In total, 377 prodCodes are assigned according to the EU food classification for pesticides MRLs.

- **ReportName**. This is the name which will be used in the EU Report on pesticide residues to present the monitoring results of a given pesticide (paramName). The ReportName is introduced by EFSA and normally comprises the active substance name only. For a number of ReportNames the suffix "(RD)" is added to indicate that there is a 'complex residue definition' in place, either for all the food products (e.g. DDT (RD)) or for one or several of the food products/groups (e.g. boscalid (RD), where a 'complex residue definition' is set for animal products) or for cases where more than one simple residue definition is assigned for different food products (e.g. myclobutanil (RD), where the residue definition for plant products is parent myclobutanil while for animal products the residue definition comprises only one metabolite (Alpha-(3-hydroxybutyl) - alpha - (4-chloro-phenyl) - 1H - 1,2,4 - triazole -1-propanenitrile (RH9090))<sup>30</sup>. The ReportName is not implemented in the SSD, but is used internally in EFSA since it is considered useful to perform data analysis at pesticide level (e.g. aggregation of data at pesticide level where more than one residue definition is set for a given pesticide).

For most of the ReportNames 377 records are available in the MatrixTool, corresponding to the 377 food products (corresponding to the prodCodes of the MATRIX catalogue reflecting the MRL food classification (exemptions see below in Section **paramCode** and **paramName**). TableA does not contain the prodCodes for baby food, fish and fish products nor for feed.

TableA also contains pesticides that are not explicitly mentioned in Annex II, III, IV or V of Regulation 396/2005 and for which according to Article 18(1)(b) the default MRL and a default residue definition (i.e. parent compound) is applicable.

<sup>29</sup> Commission Regulation (EU) No 212/2013 of 11 March 2013 replacing Annex I to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards additions and modifications with respect to the products covered by that Annex. OJ L 68, 12.3.2013, p. 30–52.

<sup>30</sup> The residue definitions can be broadly classified in simple residue definitions (i.e. residue definitions that contain only the parent compound) and residue definitions that comprise additional compounds such as metabolites (complex residue definitions). More detailed explanations can be found in the EFSA guidance document on pesticide residue data collection.

- **paramCode** and **paramName**. These columns contain the paramCode and the paramName corresponding to the description of that code, i.e. the legal residue definition for a given pesticide/crop combination set in the legislation<sup>31</sup>.

For pesticides where the same legal residue definition is applicable for all food products, the paramCode is identical for all 377 records (prodCodes) (e.g. for azoxystrobin).

For pesticides where different legal residue definitions are applicable for certain food products/groups<sup>32</sup> (cases highlighted in Regulation (EC) No 396/2005 with a footnote (R) in the header of the MRL table of the EU Pesticides Database<sup>33</sup>) the appropriate paramCodes and paramNames as specified in legislation are reported (e.g. for bixafen two different residue definitions have been set, one for plant products and honey (i.e. bixafen, paramCode RF-1056-001-PPP) and one for food of animal origin (except honey) (i.e. bixafen (sum of bixafen and desmethyl-bixafen, expressed as bixafen), paramCode RF-00000010-PAR)).

For vinclozolin (RD), procymidone (RD) and thiophanate-methyl (RD) only 311 records can be found for the respective ReportNames, because for these compounds TableA of the MatrixTool contains only records for plant products. The results for vinclozolin and procymidone for animal food products should be reported using the paramCode that is reported under the ReportName of iprodione (RD) (RF-1003-001-PPP) since the legal residue definition is a 'common moiety' residue definition, which is not specific for iprodione, but it covers also vinclozolin and procymidone (i.e. sum of vinclozolin, iprodione, procymidone and all metabolites containing the 3,5-dichloroaniline moiety expressed as 3,5-dichloroaniline)<sup>34</sup>. Similarly, for thiophanate-methyl only 311 records corresponding to the 311 prodNames for plant products are available. The analytical results for animal products have to be reported with the ReportName of carbendazim (RD) and the paramCode RF-1002-001-PPP, since the residue definitions for these two compounds are also overlapping (i.e. carbendazim and thiophanate-methyl, expressed as carbendazim).

- **ParamTypeP005A** and **ParamTypeP004A**. The paramType is a mandatory field of the SSD that needs to be reported for each of the prodCode/paramCode combination. The paramType P005A is a new code created for the 2014 data collection. The code description is defined as '*Full legal residue definition analysed*'. By default all records in TableA have a paramType P005A. For complex residue definitions, the alternative paramType P004A '*Sum based on subset*' is allocated too and should be used if the sample was not analysed for the full residue definition as specified in Regulation (EC) No 396/2005. No other paramTypes than the options reported in the MatrixTool are accepted as valid for the combinations prodCode/paramCode listed in TableA.

Also for common moiety residue definitions the code P004A is available although only one analyte should be determined according to the legal residue definition (e.g. 2,4-dimethylaniline derived from amitraz). However, since Member States reported that common moiety residue definitions created problems in routine MRL enforcement, also the paramType P004A is available which should be used if only the parent compound was determined (e.g. amitraz).

-**ChangedparamCodeDuring2014, ChangedparamNameDuring2014, paramTypeP005AafterChange** and **paramTypeP004AafterChange**. During 2014 the legal residue definitions changed for several pesticides, triggering the allocation of new paramCodes and/or changes in the existing code textual descriptions (i.e. bifentazate (RD), chlorpropham (RD), fenpropidin (RD), fenvalerate (RD) ixoxynil (RD), milbemectin (RD), tebuconazole (RD), tepraloxydim (RD), trinexapac (RD) and mepanipyrim (RD)). Thus, for the food products affected by the changed residue definitions alternative paramCodes are reported, along with the new description of the paramCode in column ChangedparamNameDuring2014 and the paramTypes, as appropriate. The paramCode in place on the date of sampling has to be selected.

<sup>31</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>32</sup> These are cases highlighted.

<sup>33</sup> EU Pesticides database: [http://ec.europa.eu/sanco\\_pesticides/public/?event=pesticide.residue.selection&language=EN](http://ec.europa.eu/sanco_pesticides/public/?event=pesticide.residue.selection&language=EN)

<sup>34</sup> This situation is an anticipated case of the legal change that will occur in 2015 to ease the handling of data.

- **EU2014.** In this column, the pesticide/crop combinations requested to be analysed in the 2014 EUCP programme<sup>35</sup> are flagged with a 'voluntary' or 'mandatory' status. The voluntary status is assigned on the basis of the column 'Remarks' of the 2014 EUCP programme and the footnote (g) that stands for 'to be analysed on voluntary basis in 2013 and 2014'. The footnotes (h) and (i) were not taken into account.

- **Annex.** In this column the source of the legal residue definition is specified (Annex II, III or V of Regulation (EC) No 396/2005). For pesticides that are not explicitly mentioned in one of the Annexes, the default MRL of 0.01 mg/kg is applicable. For these cases the entry 'Art 18(1)(b)' has been inserted in this column. According to the European Commission the parent compound is the default residue definition.

- **AS\_REPORTED\_FROM\_COM.** This column contains the full name as reported in the EU Pesticides database. This field reflects exactly the wording of the residue definition for the pesticide. In addition, where relevant, the footnotes (F) and (R) are also reported. This field is intended for informative purpose only and is not used in SSD. However, it will be used to align the paramName description with the description in the EU legislation.

- **FAT** and **R.** In these two columns the footnotes (F)<sup>36</sup> and (R)<sup>37</sup> comprised in the EU Pesticides Database of the European Commission have been listed separately for information purposes.

- **EU2014BabyFood.** Column for EFSA internal use.

## TableB

TableB contains most of the individual substances (paramName) which are components of complex legal residue definitions listed in TableA, along with the corresponding paramCodes. In the column BelongingToReportName the link to the respective ReportName reported in TableA can be found. The paramType P002A (*Part of a sum*) is allocated as a default code for all entries in TableB.

It should be noted that some of the paramCodes are listed in TableA with the paramType P005A as well as in TableB with the paramType P002A. An example is boscalid: since boscalid is the legal residue definition for plant products it is included in TableA with paramType P005A; however, for animal products a complex residue definition is allocated for this substance (sum of boscalid and M 510F01 including its conjugates). Thus, the paramCode for boscalid (RF-0049-001-PPP) is also listed in TableB combined with P002A since for animal products 'boscalid' is not the full residue definition. Thus, the combination of the paramCode for boscalid in combination with P002A would only be acceptable for the reporting of the results concerning animal products.

TableB also contains the known safeners and synergists, thus, compounds that do not fall under the MRL legislation and for which no legal residue definition is applicable. Member States can report results for these compounds, combined with the paramType P002A. Results coded with P002A will not be included in the data analysis presented in the Annual Report on pesticide residues as regards the MRL compliance (see data analysis presented in Sections 2 and 3 of the 2013 EU Report on Pesticide Residues). For specific analysis (e.g. for refined intake calculations) the results labelled with P002A might be used by EFSA.

The remaining columns in TableB are for internal use only.

## TableBabyFood

This sheet of the Matrix Tool was developed for facilitating the reporting of residue results for baby food samples. All the paramCodes of TableA are combined with the existing and valid prodCodes for babyfood: PX100001A, PX100003A, PX100004A and PX100005A.

During the Standing Committee of the Food Chain and Animal Health and pending adoption of the new delegated acts, the Commission clarified that the residues of pesticides in baby food samples shall be analysed according to the legal residue definitions set out in Regulation (EC) No 396/2005 and not according to the residue definitions set in Directive 2006/125/EC and 2006/141/EC. This

<sup>35</sup> Commission Implementing Regulation (EU) No 480/2013 of 24 May 2013 amending Implementing Regulation (EU) No 788/2012 as regards the period of analysis of certain pesticides performed on a voluntary basis. OJ L 139, 25.5.2013, p. 1.

<sup>36</sup> Indicates a residue is considered as fat soluble for animal food products.

<sup>37</sup> Indicates that more than one residue definitions is set for the relevant pesticide.

approach applies to both the national and EU-control programmes. Therefore, the ParamCodes to be selected for reporting the results of baby food should be the ones applicable for the general food under Regulation (EC) No 396/2005.

Basically, the TableBabyFood has the same structure as TableA. In the column named EU2014, the status 'voluntary' is included for those prodCodes mentioned in the 2014 EUCP programme for all the paramCodes corresponding to the legal residue definitions.

### **Additional information**

For reporting results for other food products that are not (yet) covered by the MRL legislation (Annex I of Regulation (EC) No 396/2005), such as fish, fish products, shell fish, molluscs and other marine and freshwater food products, crops exclusively used for animal feed any paramType and paramCode of TableA or TableB can be selected as considered appropriate by reporting countries. All these combinations of paramCodes and prodCodes will be acceptable to be reported in the framework of the pesticide monitoring data submission.

The prodCode Not in list (XXXXXXA) and the paramCode Not in list (RF-XXXX-XXX-XXX) are not included in the MatrixTool. Upon data transmission and validation, EFSA will check the single analytical results referring to one of both codes and propose to the Member States a potential recoding and/or the allocation of a new paramCode, as appropriate.

## **Annex B – Template for the ‘National summary report’ document**

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; the word-document is available under insert link: <https://dms.efsa.europa.eu/otcs/cs.exe?func=ll&objId=10959613&objAction=browse&viewType=1>

## **PESTICIDE RESIDUE CONTROL RESULTS**

### **NATIONAL SUMMARY REPORT**

**Country:**

**Year:**

**National competent authority/organisation:**

Web address where the national annual report is published:

- 1. 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**
- 6. ADDITIONAL INFORMATION**