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GDSN implementation guidelines for technical use in the context of the FIC Regulation

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Document summary

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Log of changes

Version	Date of change	Changed by	Summary of change
3.2		Marcus Moritz	■ Added note about the delimiter "#" (page 4) ■ Added notes about the field "Daily value intake reference" (page 28) ■ Included note on mineral water (Section 4.14.8, page 40) ■ Note about the field "Compulsory label information on the product" (page 41) ■ Added representation of combi-packs as a consumer unit (Section 4.16, pages 43–46) ■ Added Appendix 6.4 (page 54)
3.3		Marcus Moritz	■ Replaced formulation "% RDA per ready-to-eat portion" with "RDA for daily intake" (page 28)

Version	Date of change	Changed by	Summary of change
4.0		Marcus Moritz	■ Added the 1WorldSync ID throughout ■ Incorporated the new MjR3 attributes from the FIC Regulation GDSN mapping ■ Updated and replaced the XML examples ■ Section 4.1 Regulated product name: Changed note on multilingualism ■ Section 4.2 List of ingredients: Added note about footnotes ■ Section 4.12.2 NWD attributes & GDSN field assignment: Added note about preparation state ■ Section 4.14.8: Added note about measurement precision ■ Section 4.13 Instructions for use: Changed default value for preparation type ■ Section 4.13 Instructions for use: Added note about migration ■ Section 5.1 Vertical regulations: NEW ■ Section 5.2 Non-prepacked goods: NEW
4.1		Marcus Moritz	■ Added explanatory notes regarding the handling of code values to Section 4.3.3 Indication of allergens in coded form
4.2		Marcus Moritz	■ Section 4.13: Added exception to code value "READY_TO_EAT" ■ Section 4.14.2: Changed definitions for "PREPARED" and "UNPREPARED" in attribute Preparation state [M032]
4.3		Marcus Moritz	■ Section 4.13: Defined exception to code values "READY_TO_EAT" and "READY_TO_DRINK" specified ■ Section 4.14.2: Adapted format of attribute "Daily value intake reference / Language [M073]" according to standard specifications (an..500) and revised note about transitional solution ■ Section 4.15: Added notes for populating the attribute "Compulsory label information on the product" (disclaimer not permitted)

Version	Date of change	Changed by	Summary of change
4.4		Marcus Moritz	■ Section 4.3.3 Indication of allergens in coded form: Adapted/refined the definition of code value X99 to "contains no allergenic ingredients subject to mandatory labelling" ■ Section 4.7 Descriptive size: Changed attributes from "AVP" to netContentStatement and updated XML example ■ Section 4.10 Responsible food business operator: Added note that the contact name may not be repeated and deleted reference to "AVP" attribute ■ Section 4.16 Representation of "combi-packs as a consumer unit": Changed Descriptive size to Net content: Description
4.5	15.04.2020	Carolin Prinz	■ Updated MIDs, GDSN attribute names and field lengths ■ Updated migration notes for major release 3 ■ Section 6: Added provenance statement for the primary ingredient ■ Section 4.3.3: Updated definition of code value X99
4.6	01.09.2020	Carolin Prinz	■ Errata: Section 4.3.3: Corrected M-ID of the allergenTypeCode [M029] ■ Errata: Section 4.14.6: Removed Figure 4 – 12: Practical example: Vitamins and minerals due to redundancy with Figure 4 – 11 ■ Section 4.15: "Consumer package disclaimer / Language" (consumerPackageDisclaimer) [M364] has been designated for deletion in the target market Germany and will be removed from the guidelines. ■ Errata: Section 6.1 Place of provenance / Language (provenanceStatement) [M133]: Changed in German from "In Österreich gebacken" to "Gebacken in Österreich" to match the figure (this change does not affect the English translation) ■ Attribute M133 renamed Place of provenance ■ Section 7.1.1: Added fish and fish derivatives including subgroups as optional allergen information
4.7	10.12.2020	Tanja Thomsen	■ Section 4.16: Replaced the delimiter "#" used in the regulated product name with the attribute "Regulated product name sequence number [M512]" and added an example for the use of the attribute "Regulated product name sequence number [M512]"

Version	Date of change	Changed by	Summary of change
4.8	04.03.2021 Correction 1: 09.04.2021 Correction 2: 20.04.2021	Vivian Salim	■ Section 7.1: Adapted allergen names ■ Correction 1: Section 7.2: Deleted codes "FREE_FROM" and "MAY_CONTAIN" from the description of attribute M024 ■ Correction 1: Section 4.16: Changed heading "Net content" to "Net content statement / Language [M282]" ■ Correction 2: Section 4.16: Corrected 2nd repetition
4.9	01.08.2022	Tanja Thomsen	■ Section 4.16: Extended nutritional information to enable the use of servingSize for multi-packs ■ Errata: Section 4.14.8: Corrected various spelling errors in the table
5.0	01.12.2022	Tanja Thomsen	■ Section 4.16: Replaced the delimiter "#" used in the ingredient statement with the attribute "Ingredient statement sequence number [M569]" and added an example for the use of the attribute ■ Section 4.16: Extended the allergen description for multi-packs with a note that, due to the limited number of characters, the statement "Statement of allergens without component assignment:" is permissible
5.1	20.09.2023	Tanja Thomsen	■ Changed the specification of the component name in various attributes (e.g. List of ingredients, Regulated product name, ...). This must correspond to the name on the packaging. ■ Section 4.14.2: Added a note about the specification of the Daily value intake reference / Language (dailyValueIntakeReference) [M073] ■ Section 5.5: "Health claim description / Language" (healthClaimDescription) [M035] has been designated for deletion in the GDSN and the target market Germany and will be removed from the guidelines.
	22.12.2023	Phuong Cao	■ Section 4.16 Added a note about the nutritional information for multi packs: "The nutritional information shall be repeated as necessary for the number of components, even though the components have the same values."

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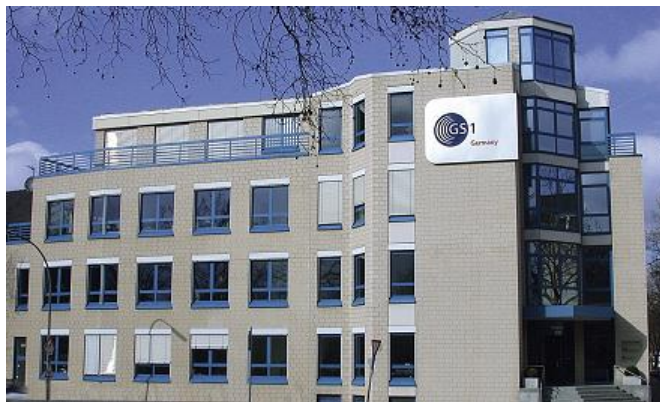
About this document

These implementation guidelines provide an overview of the data requirements according to the FIC Regulation for the German GDSN target market profile.

The Food Information to Consumers Regulation 1169/2011 (FIC Regulation) entered into force on 13.12.2014 and defines the requirements with respect to labelling and the provision of information, which must be implemented by all parties in the food chain. This document lists and describes the GDSN attributes to be used. Furthermore, it goes into greater detail on certain topics, such as combi-packs or provenance statements for primary ingredients.

Cologne, March 2021

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1 Foreword

The GDSN implementation guidelines for the C Regulation provide an overview of the data requirements pursuant to the Food Information to Consumers Regulation for the German target market profile. Compulsory information defined within the framework of the FIC Regulation is assigned to content categories. Practical examples illustrate how these attributes and fields can be populated.

2 Aim of this document

These compact guidelines provide an overview of the data requirements according to the FIC Regulation for the German target market profile.

The Food Information to Consumers Regulation 1169/2011 (FIC Regulation) entered into force on 13.12.2014 and defines the requirements with respect to labelling and the provision of information, which must be implemented by all parties in the food chain. The FIC Regulation governs such things as how foods are to be labelled and how they must be named. It also addresses such areas as presentation and distance selling, and supersedes numerous national and European directives and regulations. To better inform consumers, manufacturers must, among other things, print detailed information about allergens, nutritional values and the provenance of the product on the packaging.

The basis for this exchange of information is the Global Data Synchronization Network (GDSN), a worldwide network of data pools. The manufacturers maintain the master data of their products, including the compulsory information required, in these data pools. Via the GDSN, the product master data are made available centrally to retailers for their various sales channels, including online retail and mobile applications. Care must be taken to ensure that the (IT) processes for preparing, optimizing and providing the product master data comply with statutory requirements.

3   Overview: How do I use the implementation guidelines?

In the overview below, the compulsory information defined by the FIC Regulation is assigned to content categories (Figure 3 – 1). These content categories are intended to enable fast and easy access to the required information according to the FIC Regulation.

Figure 3 – 1: Overview of GDSN implementation guidelines

Important: Unformatted text is communicated in all free text fields described in this document. In the long term, text formatting information is to be communicated in the "formattingPattern" attributes in GDSN.

Furthermore, the use of the delimiter "#" is recommended to separate two independent text modules in a GDSN free text field (e.g. List of ingredients). The component name is to be prefixed if an assignment is necessary. Ensure that the component name – if specified – corresponds to the name on the packaging.

4 FIC Regulation mandatory requirements

4.1 Regulated product name

Status

The legal name of the food must always be specified.

In Germany, the legal names of foods are often based on the German Food Book of the Federal Ministry of Food and Agriculture (BMEL). The German Food Book is a collection of guiding principles describing the production, composition or other characteristics of foods that are of significance for the marketability of the food.

These principles are not legal norms; they supplement these and have the character of objectified expert opinions subject to judicial review. The guiding principles describe the public perception of the parties involved in the food trade, i.e. the bona fide manufacturing and commercial practice, taking into account the average consumer's expectation of the food in question.

Attributes and field contents in the GDSN

In the GDSN, the legal product name is mapped to the GDSN attribute "Regulated product name / Language" (regulated-ProductName) [M261] in the TradeItemDescriptionModule. This is an alphanumeric field with up to 500 characters.

- **GDSN attribute:** regulatedProductName
- **Name TMDE:** Regulated product name / Language [M261]
- **Format:** an..500

Practical example

The regulated product name is often in the immediate vicinity of the list of ingredients.

Figure 4 – 1: Legal product name

XML example

```
<trade_item_description:tradeItemDescriptionModule
xmlns:trade_item_description="urn:gs1:gdsn:trade_item_description:xsd:3">
        <tradeItemDescriptionInformation>
                …
                <regulatedProductName languageCode="de">Pastöse Hühnerbouillon asiatisch
                gewürzt</regulatedProductName>
                …
        </tradeItemDescriptionInformation>
</trade_item_description:tradeItemDescriptionModule>
```

4.2   List of ingredients

Status

The list of ingredients must always be indicated as long as the affixing thereof is not explicitly excluded in Article 19 FIC Regulation. The following foods shall not be required to bear a list of ingredients:

■   Fruits and vegetables

■   Carbonated water

■   Vinegar[1]

■   Cheese, butter, fermented milk and cream[2]

■   Foods consisting of a single ingredient (e.g. oatmeal)

Attributes and field contents in the GDSN

The list of ingredients is mapped to the GDSN attribute "Ingredient statement / Language" (ingredientStatement) [M047] in the FoodAndBeverageIngredientModule. The field is an alphanumeric field with up to 5000 characters. The field can be specified 1x for each language code.

■   **GDSN attribute:** ingredientStatement

■   **Name TMDE:**   Ingredient statement / Language [M047]

■   **Format:**   an..5000

Practical example

The list of ingredients is always marked by the word "Ingredients" or a name that includes the word "ingredients".

Figure 4 – 2: Practical example: List of ingredients

Important note: The voluntary allergen information (here: "[Traces: milk, celery]") are part of the list of ingredients, as are the footnotes. Storage instructions are **not** part of the list of ingredients (here: "Please store dry ...")[3].

The ingredient statement in the GDSN is a 1:1 representation of the list of ingredients as it appears on the packaging.

---

[1]Provided that no other ingredient has been added.
[2]Provided that no other ingredient has been added.
[3]See Section 11: Storage and usage instructions

XML example[4]

```
<food_and_beverage_ingredient:foodAndBeverageIngredientModule
xmlns:food_and_beverage_ingredient="urn:gs1:gdsn:food_and_beverage_ingredient:xsd:3">
        …
        <ingredientStatement languageCode="a">Zutaten: Wasser, ……… Extrakt aus
Rosmarin. [Spuren: Milch, Sellerie] *aus Gemüsesaftkonzentrat</ingredientStatement>
        …
</food_and_beverage_ingredient:foodAndBeverageIngredientModule>
```

Note on multilingualism

The GDSN structure provides for multilingualism in the list of ingredients. The list of ingredients can be specified **1x** for each language code.

Note on voluntary labelling of allergens

Until further notice, voluntary allergen labelling information ("may contain traces of ...) can be appended to the list of ingredients.[5]

Note on footnotes

Footnotes are also part of the list of ingredients and are entered in the field.

4.3 Allergens

Status

The obligation to indicate allergens results directly from the FIC Regulation (see Article 9(1)(c) in conjunction with Article 21(1)(b) in conjunction with Annex II FIC Regulation). The legal requirement is usually fulfilled by listing the allergen(s) in the name of the food or in the list of ingredients. In accordance with Article 21, it must be ensured that an allergen in the list of ingredients is ...

"emphasised through a typeset that clearly distinguishes it from the rest of the list of ingredients".

To correctly display this emphasis in distance selling, this information must also be communicated electronically. The objective is the clear and unambiguous communication of the allergen information highlighted on the label in the ingredient statement (1:1 transfer of the packaging information).

Attributes and field contents in the GDSN

Allergen information is indicated in various GDSN attributes. Specifically, these are:

■ Regulated product name (MANDATORY)

   The product name must be indicated, and allergen information can also be provided there.

■ Ingredient statement (MANDATORY)

   Allergens must be indicated and highlighted here (through the use of CAPITAL LETTERS).

■ Individual declaration of antigens (optional)

   Allergens can also be declared individually as highlighted on the packaging.

■ Coded indication of allergens (optional)

   Allergens can be communicated in code form in the GDSN.

Practical example

In the ingredient statement for the example product, the three allergens

■ Egg

---

[4]Data content is shown in blue in this GDSN example.
[5]See Section 18.1: Voluntary allergen statement

■ Soy

■ Wheat Protein

are highlighted.

Figure 4 – 3: Practical example: Allergens

The GDSN attribute should be populated in such a way that these allergens can be unambiguously identified. Exact correspondence between the allergen information on the label and the content communicated in the GDSN must be ensured.

4.3.1 Indication of allergens in the ingredient statement

The allergens are communicated as part of the ingredient statement. CAPITAL LETTERS are used to emphasise the allergens.

XML example

```
<food_and_beverage_ingredient:foodAndBeverageIngredientModule
xmlns:food_and_beverage_ingredient="urn:gs1:gdsn:food_and_beverage_ingredient:xsd:3">
        …
        <ingredientStatement languageCode="a">Zutaten: Wasser, ……… Aromen (mit Ei,
SOJA), … WEIZENEIWEISS …</ingredientStatement>
        …
</food_and_beverage_ingredient:foodAndBeverageIngredientModule>
```

4.3.2 Individual declaration of allergens

The attribute "Allergen statement / Language" (allergenStatement) [M031] in the allergeneInformationModule is available in the GDSN for the 1:1 mapping of allergenic ingredients as they are highlighted on the packaging in the ingredient statement. The individual allergenic ingredients are separated by commas.

In Germany, the use of this attribute for the labelling of allergens is optional. The field can be specified **1x** for each language code.

Field name	Format	Contents
Allergen statement / Language (allergenStatement) [M031]	an..1000	Allergens can be declared separately here.

XML example

The following example transmits the highlighted allergenic ingredients: "Egg, Soy, Wheat Protein".[6]

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[6]In the GDSN examples, the XML attributes are shown in red; the data content is shown in blue.

```
<allergen_information:allergenInformationModule
xmlns:allergen_information="urn:gs1:gdsn:allergen_information:xsd:3">
        <allergenRelatedInformation>
                <allergenStatement languageCode="de">Ei, Soja, Weizeneiweiß
                </allergenStatement>
                …
        </allergenRelatedInformation>
</allergen_information:allergenInformationModule>
```

4.3.3 Indication of allergens in coded form

Allergens can also be voluntarily indicated in coded form. The indication of the allergenic ingredients in the ingredient statement on the packaging is legally binding. The allergen type indicated there is assigned to one of the 14 allergen categories. Exceptions are the two main categories cereals containing gluten and nuts. Here specific types are identified by name (e.g. hazelnut) This specific type must be indicated on the packaging and MUST also be used for the indication in coded form (although the indication of allergens in coded form always remains optional).

The sole indication of the main category in the ingredient statement on the packaging is not legally sufficient. The sole indication of a main category in coded form therefore contradicts the principle that the information of the GDSN data set should correspond 1:1 to the indications on the packaging.

If a specific type is indicated on the packaging, the main category MAY also be indicated. This applies to allergen information on cereals containing gluten and nuts (see Appendix 6.1: Allergens).
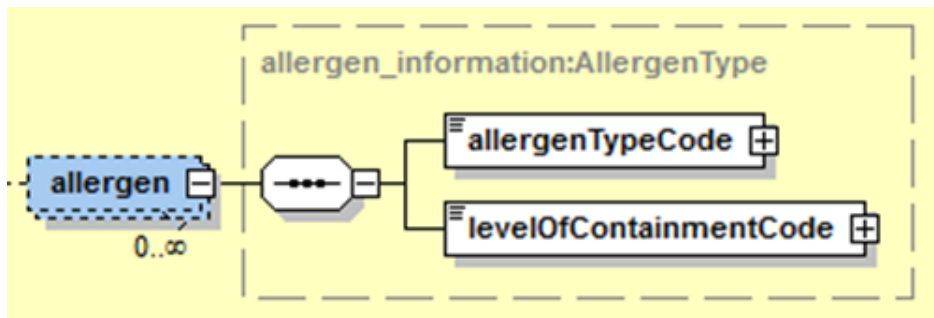
Figure 4 – 4: GDSN attribute allergen-Information: AllergenType

Field name	Format	Contents
Ingredient name / Language (allergenTypeCode) [M029]	Code	Allergen name according to code list
Allergen: Code / Level of containment (levelOfContainment) [M030]	Code	"CONTAINS"

Important note: If the code value "X99" (=Contains no allergens subject to mandatory labelling according to target market-specific regulations) is used, the code value "CONTAINS" must be stored in the attribute "Allergen: Code / Level of containment" (levelOfContainment) [M030].

Important note: The code value "FREE_FROM" in the attribute "Allergen: Code / Level of containment" (levelOfContainment) [M030] is not used.

XML example

The example illustrates the mapping of the allergens egg (code value AE) and soy (code value AY) in coded form.

```
<allergen_information:allergenInformationModule
xmlns:allergen_information="urn:gs1:gdsn:allergen_information:xsd:3">
        <allergenRelatedInformation>
                …
                <allergen>
                        <allergenTypeCode>AE</allergenTypeCode>
                        <levelOfContainmentCode>CONTAINS</levelOfContainmentCode>
                </allergen>
                <allergen>
                        <allergenTypeCode>AY</allergenTypeCode>
                        <levelOfContainmentCode>CONTAINS</levelOfContainmentCode>
                </allergen>
        </allergenRelatedInformation>
</allergen_information:allergenInformationModule>
```

4.4   Quantity of ingredients

The GDSN meets the obligation resulting from the FIC Regulation to indicate the ingredients quantitatively with the attributes "Ingredient statement / Language" [M047] or "Regulated product name / Language" [M261]. The quantity is then indicated there as a percentage behind the respective ingredient.

XML example

```
<food_and_beverage_ingredient:foodAndBeverageIngredientModule
xmlns:food_and_beverage_ingredient="urn:gs1:gdsn:food_and_beverage_ingredient:xsd:3">
        …
        <ingredientStatement languageCode="a">Zutaten: Wasser, …… Zucker, 3,6 %
        Hühnerfett, …… </ingredientStatement>
        …
</food_and_beverage_ingredient:foodAndBeverageIngredientModule>
```


Figure 4 – 5: Practical example: Quantity of ingredients

4.5   Net content

The net content is specified in the GDSN attribute "Net content / UOM" (netContent) [M281] / [M281u] in the TradeItemMeasurementsModule.

Figure 4 – 6: Practical example: Net content

XML example

```
<trade_item_measurements:tradeItemMeasurementsModule
xmlns:trade_item_measurements="urn:gs1:gdsn:trade_item_measurements:xsd:3">
        <tradeItemMeasurements>
                …
                <netContent measurementUnitCode="gr">144</netContent>
                …
        </tradeItemMeasurements>
</trade_item_measurements:tradeItemMeasurementsModule>
```

4.6 Drained weight

The drained weight shall be used as the basis for calculating the base price for products that are in a liquid medium. Canned fruit with a drained weight of 250 g is represented in the GDSN in the attribute "Drained weight / UOM (drained-Weight) [M280] / [M280u]".

XML example

```
<trade_item_measurements:tradeItemMeasurementsModule
xmlns:trade_item_measurements="urn:gs1:gdsn:trade_item_measurements:xsd:3">
        <tradeItemMeasurements>
                …
                <tradeItemWeight>
                        <drainedWeight measurementUnitCode="gr">250</drainedWeight>
                        …
                </tradeItemWeight>
                …
        </tradeItemMeasurements>
</trade_item_measurements:tradeItemMeasurementsModule>
```

4.7 Descriptive size

According to Annex IX of the FIC Regulation, the following regulation applies to the declaration of the net weight for individual packages:

"Where a prepacked item consists of two or more individual prepacked items containing the same quantity of the same product, the net quantity shall be indicated by mentioning the net quantity contained in each individual package and the total number of such packages."

The attribute "Net content statement / Language" (netContentStatement) [M282] is available in the GDSN for this purpose.

XML example

```
<netContentStatement languageCode="DE">12 x 10 g</netContentStatement>
```

4.8   Best before date

Status

The best before date of a food is the date until which this food retains its specific properties when properly stored.

The best before date or an expiry date must be printed on the packaging. For distance selling, a best before date is not required prior to delivery of the product.

4.9   Storage and usage instructions

In cases where foods require special storage conditions and/or conditions of use, those conditions shall be indicated. To enable appropriate storage or use of the food after opening the package, the storage conditions and/or time limit for consumption shall be indicated, where appropriate.

GDSN mapping

Storage and usage instructions are specified in the following two GDSN fields in the ConsumerInstructionsModule:

GDSN field name	Format	Contents
Consumer storage instructions / Language (consumerStorageInstructions) [M362]	an..5000	Storage instructions
Consumer usage instructions / Language (ConsumerUsageInstructions)[M363]	an..5000	Usage instructions

XML example

```xml
<consumer_instructions:consumerInstructionsModule
xmlns:consumer_instructions="urn:gs1:gdsn:consumer_instructions:xsd:3">
        <consumerInstructions>
                <consumerStorageInstructions languageCode="de">Bitte trocken lagern und
                vor Wärme schützen.</consumerStorageInstructions>
                …
</consumer_instructions:consumerInstructionsModule>
```


Figure 4 – 7: Practical example: Storage and usage instructions

4.10 Responsible food business operator

Status

The food business operator responsible for the food information shall be the operator under whose name or business name the food is marketed or, if that operator is not established in the Union, the importer into the Union market.

For the address data, it is generally not sufficient to indicate the postcode. A mere postcode is only even conceivable as an indication of the address in exceptional cases when the registered office of the food business operator can be identified beyond doubt without research. But complaints are inevitable.

However, several addresses can be indicated on the label, e.g. per country. A distinction must be made as to whether there are several independent (legal) entities (in which case there are also several responsible persons) or several branches of the same (legal) entity (in which case there is only one responsible person).

Customer and service telephone numbers are not a compulsory part of the address details for the responsible food business operator and are therefore voluntary additional information.

Attributes and field contents in the GDSN

The name and address of the food business operator(s) on the packaging is mapped in the GDSN to the following two attributes (an..255) directly in the CatalogueItemNotification (core):

Field name	Format	Field contents
Contact name of distributor (contactName) [M370]	an..200	Company name
Contact address of distributor (communicationAdress) [M371]	an..500	Company address

Figure 4 – 8: Practical example: Contact name / Contact address

Important note: In the M2M communication, the value "BZL" is communicated in the GDSN field "contactTypeCode".

Important note: The contact name must not be repeated in the contact address!

Practical and XML example[7]

```
<tradeItemContactInformation>
        <contactTypeCode>BZL</contactTypeCode>
        <contactAddress>78221 Singen (Hohentwiel)</contactAddress>
        <contactName>Maggi GmbH</contactName>
        …
</tradeItemContactInformation>
```

4.11 Provenance statement

Status

The rules regarding indication of the country of origin / country of provenance are definitively laid down in Article 26. Paragraph 1 defines that Regulations 509 and 510/2006 (protected designations of origin, protected geographical indications, traditional specialities guaranteed) are not affected by these regulations.[8] In addition, numerous implementing regulations that govern provenance statements for certain product groups are enumerated. These implementing regulations have yet to be drafted by the EU.[9]

In addition, the FIC Regulation makes it compulsory to indicate the place of provenance in the following cases:

- Where there is a risk of misleading the consumer.

- For particular product groups (e.g. meat, fish).Regulations from the EU are still pending here.

- If the primary ingredient (or the ingredient determining product value) is not the same as the place of provenance of the food.

Attributes and field contents in the GDSN

In the GDSN, the provenance statement is entered in the attribute "Place of provenance" (provenanceStatement) [M133] in the PlaceOfActivityModule.

Practical and XML example

For virgin olive oils, indication of the provenance has been required since July 2009, specifically where the olives were harvested and the oil produced. Previously, this was voluntary. It must also be indicated if they are blends of oils from different countries.

```
<place_of_item_activity:placeOfItemActivityModule
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:place_of_item_activity="urn:gs1:gdsn:place_of_item_activity:xsd:3"
xsi:schemaLocation="urn:gs1:gdsn:place_of_item_activity:xsd:3
PlaceOfItemActivityModule.xsd">
        …
        <placeOfProductActivity>
                …
                <provenanceStatement languageCode="de">Aus frischen Oliven verschiedener
                Anbaugebiete des EU-Mittelmeerraums</provenanceStatement>
                …
        </placeOfProductActivity>
        …
</place_of_item_activity:placeOfItemActivityModule>
```

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[7]In the GDSN examples, the XML attributes are shown in red; the data content is shown in blue.

[8] See Section: Further EU regulations.

[9] Implementing Regulation 1337/2013 with detailed rules for the implementation of Regulation (EU) No 1169/2011 governs provenance statements with regard to fresh, chilled or frozen meat of swine, sheep, goats and poultry. All other outstanding implementing regulations have been postponed indefinitely.

4.12 Alcoholic strength

The alcoholic strength only has to be indicated for alcoholic beverages with more than 1.2% alcohol by volume. It is indicated in the GDSN field "Percentage of alcohol by volume [%]" (PercentageOfAlcoholByVolume) [M109] in the AlcoholInformationModule. The field is numeric; a maximum of three digits before the decimal point and, if applicable, two digits after the decimal point can be entered.

XML example

```
<alcohol_information:alcoholInformationModule
xmlns:alcohol_information="urn:gs1:gdsn:alcohol_information:xsd:3"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:gs1:gdsn:alcohol_information:xsd:3 AlcoholInformationModule.xsd">
        <alcoholInformation>
            …
            <percentageOfAlcoholByVolume>38.14</percentageOfAlcoholByVolume>
            …
        </alcoholInformation>
</alcohol_information:alcoholInformationModule>
```

4.13 Instructions for use

Status

The instructions for use of a food shall be indicated in such a way as to enable appropriate use to be made of the food.

Attributes and field contents in the GDSN

The instructions for use are mapped in the GDSN to the following field in the FoodAndBeveragePreperationServingModule:

■ Preparation instructions / Language (preparationInstruction)   an..2500
 [M082]

In Germany, the preparation type must be indicated in addition to the preparation instructions. A corresponding code value (e.g. BOILING) must be entered in the field "Preparation type" (preparationType) [M088].

Exception: The two code values READY_TO_DRINK and READY_TO_EAT are an exception. Preparation instructions / language are not required for these. These can be indicated optionally, however.

Important note: If there is no adequate code value available that describes the preparation type in sufficient form, the use of the default value "UNSPECIFIED" is recommended in Germany.

Practical and GDSN example

Figure 4 – 9: Practical example: Instructions for use / Preparation instructions

```xml
<food_and_beverage_preparation_serving:foodAndBeveragePreparationServingModule
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:food_and_beverage_preparation_serving="urn:gs1:gdsn:food_and_beverage_preparation_serving:
xsd:3" xsi:schemaLocation="urn:gs1:gdsn:food_and_beverage_preparation_serving:xsd:3
FoodAndBeveragePreparationServingModule.xsd">
        …
        <preparationServing>
                …
        <preparationInstructions languageCode="de">Zubereitung für Suppen und Bouillons: 1.
        500g Gemüse …</preparationInstructions>
                        <preparationTypeCode>BOILING</preparationTypeCode>
                …
        </preparationServing>
        …
</food_and_beverage_preparation_serving:foodAndBeveragePreparationServingModule
```

4.14   Nutritional information

4.14.1 Status

Nutritional information per 100 g or 100 ml is compulsory. Optionally, nutritional content information can also be indicated per serving or as a percentage. This results in the following four basic options that are permitted under the FIC Regulation.

Compulsory per 100 g/ml		Optional %* per 100 g/ml	Optional g per serving	Optional %* per serving
Energy	xy g	xy%	xy g	xy%
Fat, of which	xy g	xy%	xy g	xy%
- Saturated fatty acids	xy g	xy%	xy g	xy%
Carbohydrates, of which	xy g	xy%	xy g	xy%
- Sugar	xy g	xy%	xy g	xy%
Protein	xy g	xy%	xy g	xy%
Salt, including	xy g	xy%	xy g	xy%
- Vitamin D	xy µg	xy%	xy µg	xy%
- Calcium	xy mg	xy%	xy mg	xy%

* of the RDA or nutrient reference values

RDA for an average adult (8,400 kJ/2,000 kcal) (in accordance with Article 32 V FIC Regulation in the case of indication in accordance with Article 32 IV FIC Regulation.)

4.14.2 Components
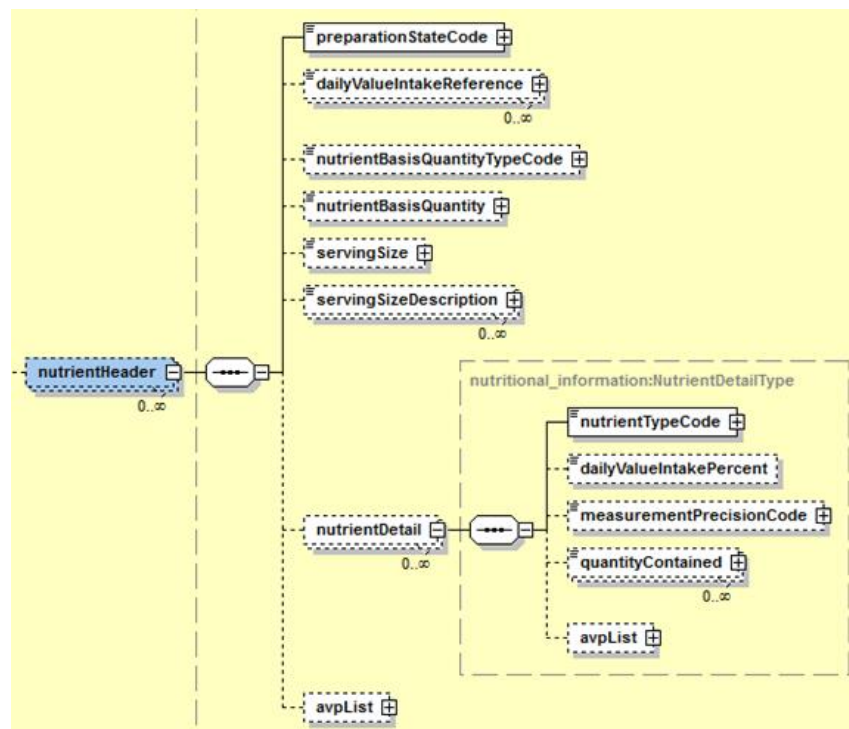
Figure 4 – 10: GDSN attributes nutrientHeader

Nutritional information group (nutrientHeader)

Group to show the nutritional content information per 100 g/ml or serving. The entire nutritional information group must be provided once for the compulsory nutritional information (e.g. "100 g contain") and can be repeated if nutritional content information (per serving) is to be communicated.

Preparation state (preparationStateCode) [M032]

Code "PREPARED": The state of the product after preparation is meant here (e.g. after milk or water has been added). The nutritional information then refers to the food prepared in this manner.

Code "UNPREPARED": The original state of a product is meant here, which does not lead to any change in the nutritional information.

Important note: The attribute "Preparation state" [M032] accesses the same code list as the attribute "Preparation type" [M088]. The use of code values other than the two "PREPARED" and "UNPREPARED" described above is not recommended.

Daily value intake reference / Language (dailyValueIntakeReference) [M073]

Free text field indicating the reference value according to Article 32(5) FIC Regulation, to which the indication of the daily intake refers.

If information on nutritional values is given as a percentage:

... the following additional statement shall be indicated in close proximity to it: "Reference intake of an average adult (8,400 kJ/2,000 kcal)".

This standard sentence (75 characters) must be used to the letter. The new nutrient reference values (NRV) are to be used for vitamins and minerals. The RDAs for the daily intake of vitamins and minerals for adults are defined in Annex XIII, Part A of the FIC Regulation. The FIC Regulation does not define a to-the-letter declaration of these nutrient reference values. One possible implementation could be:

"RDA for daily intake."

Important note: If a product declares nutritional values in the form of both a percentage and RDAs for the daily intake of vitamins and minerals, the two declarations must be separated by the delimiter "#" or by a ".".

"RDA for an average adult (8,400 kJ/2,000 kcal)# RDA for daily intake"

or

"RDA for an average adult (8,400 kJ/2,000 kcal). RDA for daily intake."

Nutrient basis quantity / UOM (nutrientBasisQuantity)

[M072] / [M072u]

Indication of the basis quantity (100 ml, 100 gr or portion)

When communicating nutritional content information per serving, the following information shall also be provided:

Serving size: Value / UOM (ServingSize) [M075] / [M075u]

Indication of serving size in structured form (e.g. 30 g)

Serving size description / Language (servingSizeDescription) [M074]

Free text field defining the typical serving size to which the information per nutrient refers. Example: Per 1/3 cup (42 g).

Nutritional values group, details (nutrientDetail)

Information on the individual nutritional values and quantities (see individual declaration of nutritional values).

Important note: Information on the number of servings per package or if the number of servings per package is not an integer can be found in the foodAndBeveragePreparationServingModule and is described there.

4.14.3 Practical example and mapping

Figure 4 – 11: Practical example: Nutritional information

Nutritional information group (nutrientHeader)

For this example, the group for mapping the nutritional content information must be repeated 2x. 1x for the information "per 100 ml" and once for the information per serving.

Preparation state (preparationStateCode) [M032]

The code "prepared" must be used because the addition of other ingredients (here water) is required.

Daily value intake reference / Language (dailyValueIntakeReference) [M073]

Free text field indicating the reference value to which the indication of the daily intake refers. Here: "RDA ...".

Nutrient basis quantity / UOM (nutrientBasisQuantity)

[M072] / [M072u]

Indication of the basis quantity (100 ml and serving).

When communicating nutritional content information per serving, the following information shall also be provided:

Serving size: Value / UOM (servingSize) [M075] / [M075u]

Indication of serving size in structured form (here = 250 ml).

Serving size description / Language (servingSizeDescription) [M074]

Free text field defining the typical serving size to which the information per nutrient refers. Here: per bowl (250 ml).

4.14.4 XML example

The following XML sample file shows the mandatory information (per 100 gr) for salt.[10]

---

[10] The code values and data content are shown in blue, the XML attributes in red.

Wiederholung 1: Pflichtangabe je 100 g

Loop: Salz

```
<nutrientHeader>
        <preparationStateCode>PREPARED</preparationStateCode>
        <nutrientBasisQuantity measurementUnitCode="GRM">100</nutrientBasisQuantity>
        <nutrientDetail>
                <nutrientTypeCode>SALTEQ</nutrientTypeCode>
                <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
                <quantityContained measurementUnitCode="GRM">0,8</quantityContained>
        </nutrientDetail>
        …
</nutrientHeader>
```

Wiederholung 2: Angaben je Portion

Loop: Salz

```
<nutrientHeader>
        <preparationStateCode>PREPARED</preparationStateCode>
        <nutrientBasisQuantity measurementUnitCode="PNT">1</nutrientBasisQuantity>
        <servingSize measurementUnitCode="MLT">250</servingSize>
        <servingSizeDescription languageCode="DE">pro Teller (250
                ml)</servingSizeDescription>
        <nutrientDetail>
                <nutrientTypeCode>SALTEQ</nutrientTypeCode>
                <dailyValueIntakePercent>39</dailyValueIntakePercent>
                <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
                <quantityContained measurementUnitCode="GRM">1.9</quantityContained>
        </nutrientDetail>
        …
</nutrientHeader>
```

4.14.5 Individual declaration of nutritional values

The Big 7 must always be indicated (marked in bold) in the nutritional information and can be supplemented with the other contents. The energy value shall be expressed in the units kilojoules (code = KJO) and kilocalories (code = E14). The following sequence must be observed on the product label:

	per 100 g (or 100 ml)	GDSN code
Energy	2,153 kJ / 516 kcal	ENER-
Fat, of which	21 g	FAT
- Saturated fatty acids	10 g	FASAT
- Monounsaturated fatty acids	7 g	FAMSCIS
- Polyunsaturated fatty acids	4 g	FAPUCIS
Carbohydrates, of which	49 g	CHOAVL
- Sugar	2.4 g	SUGAR-
- Polyvalent alcohols	1 g	POLYL
- Starch	2.7 g	STARCH
Dietary fibre	4.2 g	FIBTG
Protein	0 g	PRO-

Salt	1.09 g	SALTEQ

If a nutrient in question is only present in small amounts (defined threshold values) or not in the food at all, this can be indicated by a text module that must be placed in the immediate vicinity of the nutritional information. The respective nutrient does not then have to be explicitly stated.

4.14.6 Vitamins and minerals

Annex XIII of the FIC Regulation defines the vitamins and minerals that can be declared as well as their RDAs and units of measure. The individual code values for the units of measure and the vitamins and minerals can be taken from the FIC Regulation GDSN mapping.

4.14.7 Analytical composition of mineral water

Mineral waters are exempt from compulsory nutrition labelling. However, based on EU law (Directive 2009/54/EC on the exploitation and marketing of natural mineral waters), a statement of the analytical composition of mineral waters giving their characteristic constituents is mandatory information for mineral waters. The same GDSN fields used for the nutritional information are used here. Only the basis quantity (here: gr per litre) and the individual code values for the minerals listed on the packaging are different. A selection list of minerals available in the GDSN is provided in Appendix 6.4: "Analytical composition of mineral water".

4.14.8 Attributes in the GDSN for the individual declaration of nutritional values
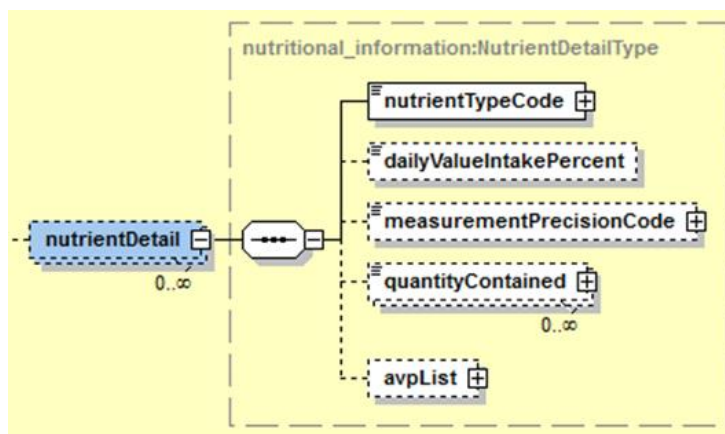
Figure 4 – 12: GDSN attribute nutrientDetail

Field name	Format	Contents
Energy, nutritional values, vitamins & minerals (nutrientTypeCode)	Coded	Indication of the code value for energy nutritional values or vitamins & minerals
% of the RDA (dailyValueIntakePercent)	0.01 – 100.00 %	Indication of the percentage value of the recommended daily intake
Measurement precision (measurementPrecision)	Coded	Indication of an average value (APPROXIMATELY) or a "less than statement" (LESS_THAN)
Value / Unit of measure (quantityContained)	n..15 (15.5)	Indication of the absolute value

Important note: The fields for measurement precision must always be indicated when a measurement precision is indicated on the packaging (this is for example "<"). If only a value (absolute value or percentage) is indicated on the packaging, the indication of the measurement precision may be omitted. The current transitional solution using the value "APPROXIMATELY" as the default value can still be used. If necessary, measurement precision must be maintained separately for the absolute values and the percentage values.

XML example

The following sample XML file reflects the repetitions for the energy values and the 5 following nutritional values for the mandatory information per 100 ml.

```xml
<nutrientDetail>
        <nutrientTypeCode>ENER-</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="KJO">118</quantityContained>
        <quantityContained measurementUnitCode="E14">28</quantityContained>
</nutrientDetail>
<nutrientDetail>
        <nutrientTypeCode>FAT</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="GRM">0.4</quantityContained>
</nutrientDetail>
<nutrientDetail>
        <nutrientTypeCode>FASAT</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="GRM">0.2</quantityContained>
</nutrientDetail>
<nutrientDetail>
        <nutrientTypeCode>CHOVAL</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="GRM">5.0</quantityContained>
</nutrientDetail>
<nutrientDetail>
        <nutrientTypeCode>SUGAR-</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="GRM">1.7</quantityContained>
</nutrientDetail>
<nutrientDetail>
        <nutrientTypeCode>FIBTG</nutrientTypeCode>
        <measurementPrecisionCode>APPROXIMATELY</measurementPrecisionCode>
        <quantityContained measurementUnitCode="GRM">0.4</quantityContained>
</nutrientDetail>
```

Labels on the left margin of the XML block (top to bottom): Energie, Fett, Gesättigte Fettsäuren, Kohlenhydrate, Zucker, Ballaststoffe

4.15 Mandatory information for specific foods

Status

Article 10 specifies that in addition to the particulars listed in Article 9, additional particulars shall be mandatory for specific types or classes of food. This mandatory information is partly defined in the annexes of the FIC Regulation (in particular Annex III and VI) or in further-reaching EU regulations.

Attributes and field contents in the GDSN

In the GDSN, this information can be communicated in the field "Compulsory additive label information / Language" (compulsoryAdditivesLabelInformation) [M094] in the HealthRelatedInformationModule as free text information (an..1000).

Important note: The attribute "Compulsory additive label information / Language" (compulsoryAdditivesLabelInformation) [M094] is reserved for FIC Regulation-relevant mandatory information and for mandatory information resulting from the vertical regulations (see Section 5.1). The communication of general disclaimers (e.g. "no ingredient statement required", "no other mandatory information") in this field is not permitted.

Important note: For the target market Germany, there is the option to communicate mandatory information in coded form. See Annexes 6.2 and 6.3.

Practical and GDSN example

For lean minced meat, FIC Regulation Annex VI, Part B specifies that the fat content must be stated on the packaging as follows: "Fat content less than 7%"!

```
<health_related_information:healthRelatedInformationModule
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:health_related_information="urn:gs1:gdsn:health_related_information:xsd:3"
xsi:schemaLocation="urn:gs1:gdsn:health_related_information:xsd:3
HealthRelatedInformationModule.xsd">
        <healthRelatedInformation>
                <compulsoryAdditiveLabelInformation languageCode="de">Fettgehalt geringer
                als 7 %</compulsoryAdditiveLabelInformation>
                ...
        </healthRelatedInformation>
</health_related_information:healthRelatedInformationModule>
```

4.16   Representation of "combi-packs as a consumer unit"

Status

In the case of combi-packs as a consumer unit, different individual products are marketed in a common package. It must be ensured here that the information specified by the FIC Regulation is provided for each component on the outer packaging.

The core problem with electronic communication is in particular the correct assignment of the respective information to the right product component. This applies in particular to the character-intensive list of ingredients and the nutritional information.

Figure 4 – 13: Practical example: Combi-pack

Important note: The separation of two independent text modules for the respective component in a GDSN free text field (e.g. List of ingredients) can be indicated by means of individual repetitions and the associated sequence. If the attribute cannot be repeated, the use of the delimiter "#" is recommended. The component name must be prefixed to both variants, as indicated on the packaging, if an assignment is necessary.

Attributes and field contents in the GDSN

For combi-packs as a consumer unit, basically the same attributes are used to communicate FIC Regulation information. The delimiter "#" is usually used to separate information about the respective components (see legal name of the food for an exception). In each case, the component name must be prefixed as indicated on the packaging.

Legal name of the food

With the introduction of repeatability in the GDSN, the repetition of different components in a product is covered in the standard via the attribute "Regulated product name sequence number" [M512], and the use of the delimiter "#" is no longer recommended.

Important note: Ensure repetition of the regulated product name of the food via the attribute "Regulated product name sequence number [M512]". To list individual component names, a new repetition is indicated for each, and the component name must be prefixed as indicated on the packaging.

Example: Advent calendar with 10 different, non-GTIN-coded components

Figure 4 – 14: Indication of the legal name of the food for combi-packs using the attribute "Regulated product name sequence number [M512]"

Indication of the legal name of the food in the case of combi-packs using the attribute "Regulated product name sequence number [M512]":

Repetition1	Sequence number
MARS Mini – Milchschokolade (36%), gefüllt mit feiner Candy-Creme (34%) und Karamell (29%)	1
MARS Mini – Milk chocolate (36%)	1

Repetition2	Sequence number
SNICKERS Mini – Milchschokolade, gefüllt mit feiner Candy-Creme (16%), Karamell (27%) und gerösteten Erdnüssen (22%)	2
SNICKERS Mini – Milk chocolate …	2

Repetition3	Sequence number
MILKY WAY Mini – Milchschokolade (38%), gefüllt mit leicht und locker geschlagener Candy-Creme (62%)	3
MILKY WAY Mini – Milk chocolate …	3

Note: Repetitions 4 to 9 analogous to Repetitions 1 to 3!

Repetition10	Sequence number
BOUNTY Mini – Milchschokolade (36%), gefüllt mit saftigem weissen Kokosmark	10
BOUNTY Mini – Milk chocolate …	10

Net content statement / Language [M282]

A repetition of the attribute is not covered in the standard. If necessary, the European recommendation "Use of the delimiter #" applies to list the individual indications.

Ingredient statement

If a summary ingredient statement is indicated on the packaging, this is entered in the ingredient statement field in the first repetition.

With the introduction of repeatability in the GDSN, the repetition of ingredient statements for different components in a product is covered in the standard via the attribute "Ingredient statement sequence number" [M569], and the use of the delimiter "#" is no longer recommended.[11]

Important note: When listing individual ingredient statements, a new repetition is indicated in each case.

Each ingredient statement must be prefixed by the component name as indicated on the packaging.

---

[11] To give users sufficient time to adapt their interfaces, the use of the attribute "Ingredient statement sequence number" [M569] as a delimiter in a production environment is not recommended until after the GDSN BMS 3.1.23 release on 20.05.2023.

Example: Advent calendar with 10 different, non-GTIN-coded components(see Figure 4 – 14)

Indication of ingredient statements for combi-packs using the attribute "Ingredient statement sequence number [M569]":

Repetition1	**Sequence number**
MARS Mini ingredients: Sugar, glucose syrup, cocoa butter, ...	1

Repetition2	**Sequence number**
SNICKERS Mini ingredients: Sugar, glucose syrup, PEANUTS, ...	2

Repetition3	**Sequence number**
MILKY WAY Mini ingredients: Sugar, glucose syrup, SKIM MILK POWDER, ...	3

Note: Repetitions 4 to 9 analogous to Repetitions 1 to 3!

Repetition10	**Sequence number**
BOUNTY Mini Ingredients: Sugar, coconut flakes (21%), glucose syrup, ...	10

Allergens

The mandatory requirements are met by means of CAPITAL LETTERS in the respective ingredient statements. The optional elements (coded or individually in the allergen statement) then cover the full list of allergens across all components.

Important note: Due to the limited number of characters in the allergen statements, the statement "Declaration of allergens without component assignment:" may be given in addition to the full list of allergens.

Quantity of specific ingredients

Covered via ingredient statements.

Net content

The net content of the complete product is deducted from the net content. This shall be calculated, if necessary.

Storage and usage instructions

Either the usage instructions apply to the entire combi-pack (e.g. "Do not refreeze after thawing.") or the European recommendation "Use of the delimiter #" applies.

Company name, address

Even with combi-packs, there is only one responsible food business operator.

Country of origin within the meaning of the FIC Regulation

Not problematic, as generally valid for combi-pack. A comprehensive provenance statement for each component is not expected.

Instructions for use

For reasons of space alone, different preparation instructions for the individual components are not expected on a regular basis. If this is the case, the component name must precede the preparation instructions. The component name must be as indicated on the packaging.

Alcoholic strength

Can only be specified 1 time in the standard. If different information on the alcoholic strength must be provided, this shall be indicated in the attribute "Compulsory label information on the product" (compulsoryAdditiveLabelInformation).

Nutritional information

The field Serving size description / Language (servingSizeDescription) [M074] is used in the nutritional information to identify the component. In this case, the mandatory nutritional information per 100 g or 100 ml can be supplemented by repetition of the basis quantity in the attribute Serving size: Value / UOM [M075] / [M075u] in parallel to the field Nutrient basis quantity / UOM [M072] / [M072u] (nutrientBasisQuantity) with indication of the basis quantity (100 ml or 100 g).

Example: MIXED MINIS bag 400 g (multi-component article)

	MARS		MILKY WAY		TWIX		BOUNTY		SNICKERS	
Portionen pro Packung: / Annosta per pakkaus: / Portioner per förpackning: / Μερίδες ανά συσκευασία:		4		3		5		4		4
Portionsgrösse: / Annoskoko: / Portionsstorlek: / Μέγεθος μερίδας:		18g		15.5g		20g		28.5g		18g
Nährwertinformation / Ravintosisältö / Näringsinformation / Διατροφικές Πληροφορίες	/ 100g	/ 18g (%*)	/ 100g	/ 15.5g (%*)	/ 100g	/ 20g (%*)	/ 100g	/ 28.5g (%*)	/ 100g	/ 18g (%*)
Energie / energia / energi / Ενέργεια	1868kJ 444kcal	336kJ (4%) 80kcal (4%)	1866kJ 443kcal	289kJ (3%) 69kcal (3%)	2065kJ 493kcal	413kJ (5%) 99kcal (5%)	2037kJ 487kcal	581kJ (7%) 139kcal (7%)	2020kJ 482kcal	364kJ (4%) 87kcal (4%)
Fett / Rasva / Λιπαρά	16g	2.9g (4%)	15g	2.3g (3%)	24g	4.7g (7%)	26g	7.3g (10%)	23g	4.1g (6%)
davon gesättigte Fettsäuren / josta tyydyttyneitä / varav mättat fett / εκ των οποίων κορεσμένα	7.7g	1.4g (7%)	7.2g	1.1g (6%)	14g	2.8g (14%)	21g	6.1g (31%)	8.0g	1.4g (7%)
Kohlenhydrate / hiilihydraatti / kolhydrat / Υδατάνθρακες	71g	13g (5%)	73g	11g (4%)	65g	13g (5%)	59g	17g (7%)	61g	11g (4%)
davon Zucker / josta sokereita / varav sockerarter / εκ των οποίων σάκχαρα	62g	11g (12%)	66g	10g (11%)	49g	9.8g (11%)	48g	14g (16%)	52g	9.3g (10%)
Eiweiss / proteiini / protein / Πρωτεΐνες	3.9g	0.7g (1%)	3.3g	0.5g (1%)	4.4g	0.9g (2%)	3.7g	1.1g (2%)	8.6g	1.5g (3%)
Salz / Suola / Salt / Αλάτι	0.43g	0.08g (1%)	0.53g	0.08g (1%)	0.40g	0.08g (1%)	0.25g	0.07g (1%)	0.63g	0.11g (2%)

*Referenzmenge für einen durchschnittlichen Erwachsenen (8400 kJ/2000 kcal) / *Aikuisen keskivertokäyttäjän saannin vertailuarvo (8400 kJ / 2000 kcal) / *Referensintag för en genomsnittlig vuxen (8400 kJ/2000 kcal) / *Προσλαμβανόμενη ποσότητα αναφοράς ενός μέσου ενήλικα (8400 kJ/2000 kcal)

Field name	Contents (Component Mars 100 g)	Contents (Component Mars 18 g)
Preparation state (preparationStateCode) [M032]	UNPREPARED	UNPREPARED
Daily value intake reference / Language (dailyValueIntakeReference) [M073]		RDA for an average adult (8,400 kJ/2,000 kcal)
Nutrient basis quantity / UOM (nutrientBasisQuantity) [M072] / [M072u]	100 (GRM)	1PTN
Serving size: Value / UOM (ServingSize) [M075] / [M075u]	100 (GRM)	18 (GRM)
Serving size description / Language (servingSizeDescription) [M074]	MARS	MARS

The nutritional information shall be repeated as necessary for the number of components, even though the components have the same values.
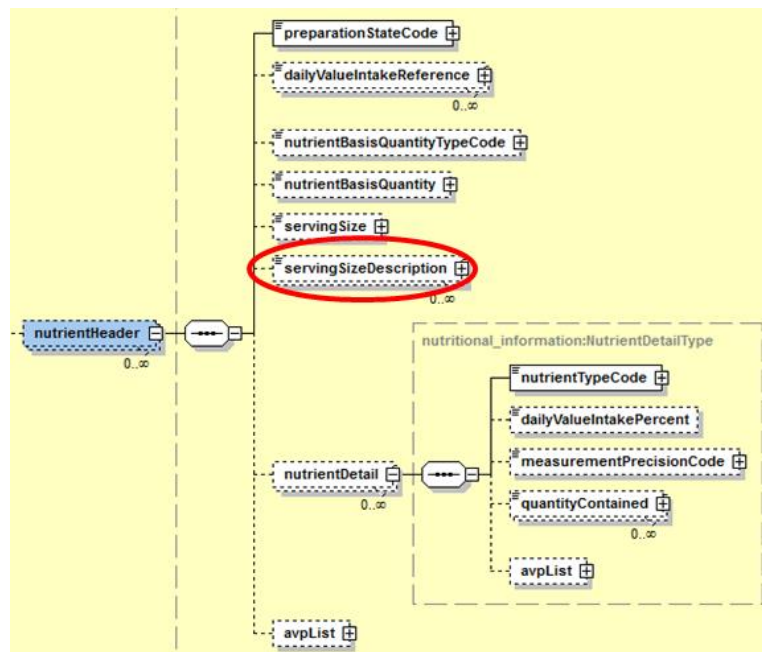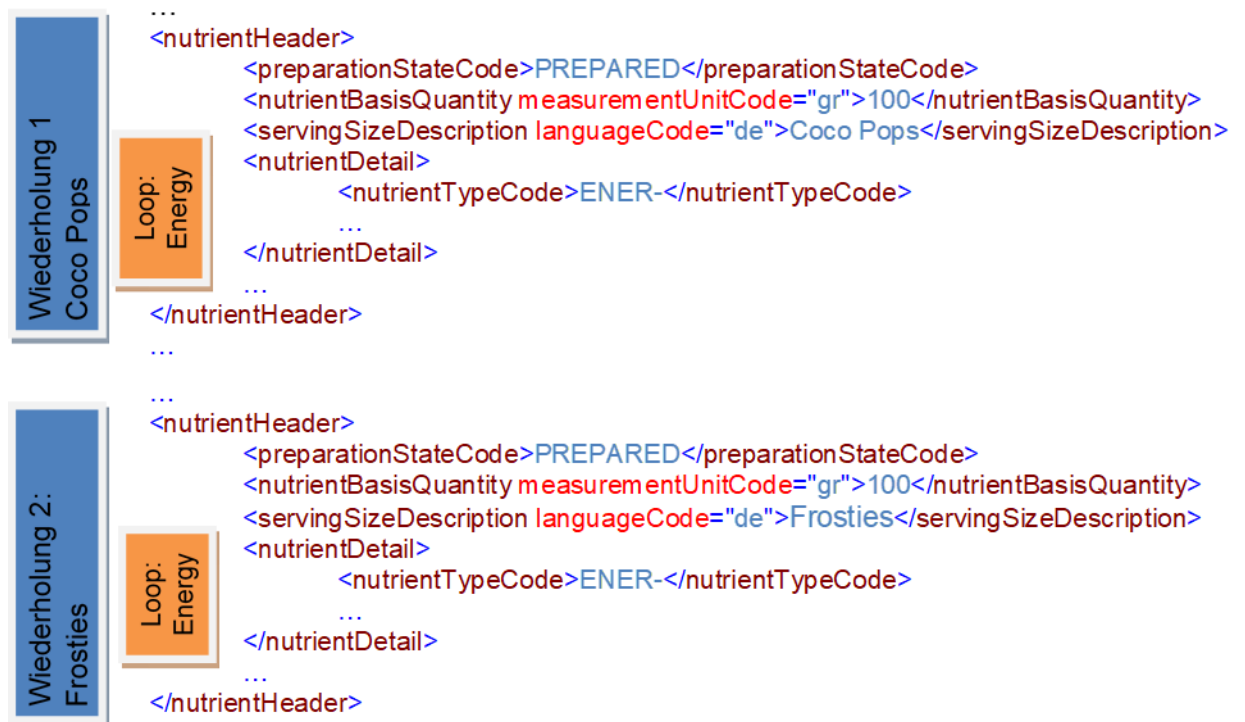

Figure 4 – 15: GDSN attribute servingSizeDescription

Practical and GDSN example

Nutritional information for Kellogg's multi-packs[12]

---

[12] The code values and data content are shown in blue, the XML attributes in red.

```
...
<nutrientHeader>
        <preparationStateCode>PREPARED</preparationStateCode>
        <nutrientBasisQuantity measurementUnitCode="gr">100</nutrientBasisQuantity>
        <servingSizeDescription languageCode="de">Coco Pops</servingSizeDescription>
        <nutrientDetail>
                <nutrientTypeCode>ENER-</nutrientTypeCode>
                ...
        </nutrientDetail>
        ...
</nutrientHeader>
...
```

(Wiederholung 1 Coco Pops; Loop: Energy)

```
...
<nutrientHeader>
        <preparationStateCode>PREPARED</preparationStateCode>
        <nutrientBasisQuantity measurementUnitCode="gr">100</nutrientBasisQuantity>
        <servingSizeDescription languageCode="de">Frosties</servingSizeDescription>
        <nutrientDetail>
                <nutrientTypeCode>ENER-</nutrientTypeCode>
                ...
        </nutrientDetail>
        ...
</nutrientHeader>
```

(Wiederholung 2: Frosties; Loop: Energy)

Other declarable additional information

The European recommendation "Use of the delimiter #" is observed. If an assignment is necessary, the name of the component must be indicated. This must correspond to the name on the packaging.

5 Further-reaching EU regulations

EU directives have already been drafted for some areas of food labelling. These remain valid. However, if the manufacturer puts this information on their product (e.g. the EU organic label shown below), they must comply with the defined framework conditions. The information is thus optionally mandatory, i.e. it is basically voluntary, but if applied, it is subject to defined legal framework conditions.

5.1 Vertical regulations

Article 2(2)(c) of the FIC Regulation defines "mandatory food information" as:

"the particulars that are required to be provided to the final consumer by Union provisions".

Thus not only do the labelling requirements directly defined in the FIC Regulation apply, but also the requirements that are defined or will be defined in the future in other product-specific Union regulations (vertical regulations). Examples of such labelling requirements include:

- The identification mark in accordance with REGULATION (EC) No 853/2004 laying down specific hygiene rules for food of animal origin

- Provenance statement for olive oil in accordance with

  IMPLEMENTING REGULATION (EU) No 29/2012 on marketing standards for olive oil

- …

Figure 5 – 1: Example image of an identification mark

All mandatory requirements from the FIC Regulation and the vertical regulations are mapped exclusively to the attributes listed in the FIC Regulation mapping. Existing attributes in the TMDE are additional optional structured information. These include:

- E numbers (list of ingredients)

- Age of the target group (in VKaW)

- Declarable additives (see Appendix 6.2)

- Additive categories (see Appendix 6.3)

- …

5.2 Non-prepacked goods

Article 44 of the FIC Regulation states that the particulars referred to in Articles 9 and 10 are not mandatory if food:

- are offered for sale without pre-packaging

- are packed on the sales premises at the consumer's request

- are prepacked for direct sale.

Figure 5 – 2: Example of loose goods

Important note: Allergens or substances that trigger intolerances are an exception. These must be declared. The EU member states may additionally adopt national regulations in this regard.

The regulation applicable in Germany is the "Vorläufige Lebensmittelinformations-Ergänzungsverordnung (vorlLMIEV)" (Provisional Supplementary Food Information Regulation), which regulates the labelling requirement for non-prepacked food.

According to this, end consumers and mass caterers must be informed about allergenic substances in non-prepacked food by means of a sign on or near the food, or by a notice in the shop. Alternatively, the consumer may be informed by means of other written or electronic information, e.g. by means of a list in "notebook form", if this is indicated near the food or in a notice in the shop.

When food is supplied by mass caterers, allergen information shall be provided on menus and beverage menus or in price lists, which may also take the form of footnotes where appropriate.

The labelling requirements for products that are packaged at the point of sale at the request of the consumer or prepacked for direct sale are not yet definitively regulated in Germany. The Food Information Implementing Regulation (LMIDV) is available in a draft version and has not yet been finally adopted.

5.3 Voluntary allergen labelling

Voluntary allergen labelling ("may contain traces of ...") is currently not regulated by law and therefore completely voluntary. However, the EU is drafting an implementing regulation that will supplement the FIC Regulation in this area. EU implementing regulation is still pending.

5.4 EC Organic Regulation

The Organic Regulation (EC) No 834/2007 on "organic production and labelling of organic products" defines how products and foodstuffs labelled as organic must be produced and manufactured. Only products that at least satisfy the EC Organic Regulation:

- may use the terms bio, eco, biological, ecological, controlled ecological, controlled biological, biological farming, ecological farming, biodynamic and bio-organic.

- may use the Organic Agriculture EWC Control System label, the indication of the corresponding number (e.g. DE-034-Öko-Kontrollstelle) and the name of the organic inspecting body (at least one of the two must be indicated).

- may bear an organic label and/or the name and logo of the organic growers' association of which they are a member.

Figure 5 – 3: Example of an organic label

The organic label can be communicated in the GDSN in coded form in the field "Packaging marked label accreditation code" (packagingMarkedLabelAccreditationCode) [M309].

5.5 Nutrition and health claims

Regulation (EC) No 1924/2006 (Health Claims Regulation) regulates nutrition and health claims; Regulation (EU) No 432/2012 regulates health claims for the reduction of disease risk:

■ Regulation (EC) No 1924/2006,

■ Regulation (EU) No 432/2012.

These claims can be communicated as free text in the GDSN attribute "Nutritional claim / Language" (nutritionalClaim) [M078] with indication of the language used.

The code lists "nutritionalClaimTypeCode" [M080] and "nutritionalClaimNutrientElementCode" [M079] are available for the communication of this information in coded form.

5.6 Protected indications of provenance

Protected designation of origin (PDO, German g.U.)

The protected designation of origin means that the production, processing and manufacture of a product take place in a specific geographical area according to a recognised and defined procedure (e.g. Parma ham, champagne).

■ Regulation (EC) No 510/2006

Figure 5 – 4: Example of a protected designation of origin

Protected geographical indication (PGI, German g.g.A.)

For protected geographical indications, it is sufficient if one of the stages (production, processing or manufacture) took place in a specific area of origin.

■ Regulation (EC) No 510/2006

Figure 5 – 5: Example of a protected geographical indication

Traditional speciality guaranteed (TSG, German g.t.S.)

The EU Community label for products recognized as traditional speciality guaranteed (TSG). Traditional speciality guaranteed does not denote a geographical origin, but only a traditional composition of or traditional production method for the product (e.g. mozzarella).

■   Regulation (EC) No 509/2006

Figure 5 – 6: Example: Traditional speciality guaranteed

This label can be communicated in the GDSN in coded form in the field "Packaging marked label accreditation code" (packagingMarkedLabelAccreditationCode) [M309].

6 Provenance of the primary ingredient

This section provides guidance on the exchange of information on the provenance of the primary ingredient(s) of a product. The provenance of the primary ingredient(s) must be indicated on the product if it is different from the provenance of the product itself.

The full rules are set out in the European Commission Implementing Regulation (EU) 2018/775, which sets out the rules for the application of Article 26(3) of Regulation (EU) No 1169/2011. This implementing regulation is effective from 1 April 2020.

Exemptions are described in Article (8) and Article 1(1) of Implementing Regulation (EU) 2018/775.

The definition of the primary ingredient is found in Article 2(2)(q) of Regulation (EU) No 1169/2011.

This section is based on the recommendation of GS1 in Europe "GDSN Implementation Guidelines for EU Regulation 1169/2011". Target market-specific, European exceptions are also described there.

6.1 General principles

The following general principles must be observed when communicating the provenance of primary ingredients:

a. Currently only attributes on the base unit level are part of this recommendation.

b. The attribute "Place of provenance" (provenanceStatement) [M133] shall be used for the provenance statement for the primary ingredient in all cases where this information appears as a separate statement on the product packaging. This also includes cases where such a claim is made at the end of the ingredient statement.

c. Only one instance of the provenance statement shall be used. Repeating the provenance statement is not recommended if there are multiple provenance statements for the product or the primary ingredients.

d. If statements on both the provenance of the product and the provenance of the primary ingredient are provided on the product packaging, the provenance statement for the product comes first, followed by information on the provenance of the primary ingredient(s).

e. If information on the provenance of the primary ingredients is given within the ingredient statement (not as a separate statement at the end of the ingredient statement), the attribute "Ingredient statement / Language" (ingredientStatement) [M047] is used to exchange this information. The information is also still expected in the attribute "Place of provenance" (provenanceStatement) [M133].

f. No information on the provenance of the primary ingredient(s) shall be indicated in the attribute "Regulated product name" (regulatedProductName) [M261]. The only exception is when national/EU legislation considers this information as part of the legal name of some products.

The following four use cases in Sections 6.2, 6.3, 6.4 and 6.5 illustrate how these principles are applied in practice.

6.2   Use case 1 – Provenance statement for the primary ingredient at the end of the ingredient statement

Figure 6 – 1: Provenance statement for primary ingredient Use case 1

The provenance of this product is Austria and the label states *"Baked in Austria"*.

There is no information about the provenance of the primary ingredients within the ingredient statement. The separate declarations can be found at the end of the ingredient statement: *"Flour from the EU. Raisins from the non-EU"*.

The following content is expected in the attributes mentioned below[13]:

■ **Ingredient statement / Language (ingredientStatement) [M047]:** Ingredients: WHEAT FLOUR, Raisins 17%, Sugar, (...) May contain traces of NUTS.

■ **Place of provenance / Language (provenanceStatement) [M133]:** Baked in Austria. Flour from the EU. Raisins from the non-EU.

■ **Trade item country of origin code (countryOfOrigin/countryCode) [M099]:** 040 [ISO code for Austria]

---

[13] For illustration purposes, the values in the attributes are partly abbreviated by "(...)".

6.3 Use case 2 – Provenance statement for the primary ingredient as a separate claim (anywhere on the product packaging)

Figure 6 – 2: Provenance statement for primary ingredient Use case 2

The origin of this product is the Alsace region of France. The declaration *"FABRIQÉ EN ALSACE" (English translation "PRODUCED IN ALSACE")* is present on the product packaging. There is no information about the provenance of the primary ingredients within the ingredient statement. On the front of the packaging, however, there is a separate claim stating *"Tomates, oignons et rhym origine : UE" (English translation "Provenance of tomatoes, onions and thyme: EU")*.

The following content is expected in the attributes mentioned below[14]:

■ **Ingredient statement / Language (ingredientStatement) [M047]:** This is a verbatim reproduction of the ingredient statement given on the product, which is located on the back of the packaging and is not visible in this example.

■ **Place of provenance / Language (provenanceStatement) [M133]:** "Produced in Alsace. Provenance of tomatoes, onions and thyme: EU".

■ **Trade item country of origin code (countryOfOrigin/countryCode) [M099]:** 250 [ISO code for France]

---

[14] For illustration purposes, the values in the attributes are partly abbreviated by "(...)".

6.4 Use case 3 – Provenance statement for the primary ingredient contained in the product name
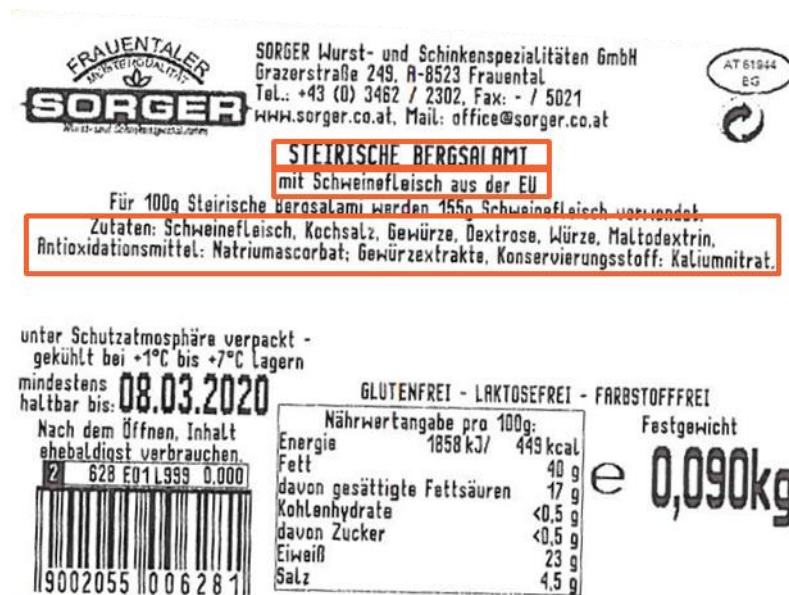

Figure 6 – 3: Provenance statement for primary ingredient Use case 3

The provenance of this product is the Austrian region of Styria. No statement is made on the label, as this information is contained in the name of the product "Steirische Bergsalami" (English translation "Styrian Mountain Salami"). There is a separate indication under the name of the product stating that the provenance of the main ingredient, pork, is from the EU: *"mit Schweinefleisch aus der EU"* (English translation: *"with pork from the EU"*).

The following content is expected in the attributes mentioned below[15]:

- **Ingredient statement / Language (ingredientStatement) [M047]:** Ingredients: Pork, Table salt, Spices, Dextrose, (...).

- **Place of provenance / Language (provenanceStatement) [M133]:** with pork from the EU.

- **Trade item country of origin code (countryOfOrigin/countryCode) [M099]:** 040 [ISO code for Austria]

---

[15] For illustration purposes, the values in the attributes are partly abbreviated by "(...)".

6.5 Use case 4 – Provenance statement for the primary ingredient within the ingredient statement (in brackets)

Figure 6 – 4: Provenance statement for primary ingredient Use case 4

The provenance of this product is Italy. This is not explicitly stated on the product packaging, rather it can be seen from the Italian flag, the Italian address of the producer and the health mark. Within the ingredient statement, it is noted in brackets that the pork leg comes from the EU.

The following content is expected in the attributes mentioned below:

■ **Ingredient statement / Language (ingredientStatement) [M047]:** Ingredients: pork leg (EU), salt, dextrose, natural flavourings, antioxidant: sodium ascorbate, preservative: sodium nitrite.

■ **Place of provenance / Language (provenanceStatement) [M133]:** pork leg from the EU.

■ **Trade item country of origin code (countryOfOrigin/countryCode) [M099]:** 380 [ISO code for Italy]

7 Appendices (code lists)

7.1 Allergens

Annex II of the FIC Regulation defines the following 14 allergens that must be declared when used in food:

AC   Crustaceans and products thereof

AE   Eggs and products thereof

AF   Fish and products thereof

AM   Milk and products thereof (including lactose)

AN   Tree nut (nuts) and its derivatives

AP   Peanuts and products thereof

AS   Sesame seeds and products thereof

AU   Sulphur dioxide and sulphites

AW   Cereals containing gluten and products thereof

AY   Soybeans and products thereof

BC   Celery and products thereof

BM   Mustard and products thereof

NL   Lupin and products thereof

UM   Molluscs and products thereof

In addition, there are further allergens in the GDSN code list that are relevant in the food law context. These are more detailed specifications of the allergen information on cereals containing gluten and nuts:

GB   Barley and its derivatives

GK   Kamut

GO   Oats and their derivatives

GS   Spelt and its derivatives

ML   Lactose

NR   Rye and its derivatives

SA   Almond and its derivatives

SC   Cashews and their derivatives

SD   Beech nuts and their derivatives

SE   Butternut and its derivatives (grey walnut)

SF   Chinquapine and its derivatives (Pennsylvanian chestnut)

SG   Ginkgo nuts and their derivatives

SH   Hazelnut and its derivatives

SM   Macadamia nut and its derivatives (also called Queensland nut)

SP   Pecan nut and its derivatives

SR   Brazil nut and its derivatives

ST   Pistachio and its derivatives

SW   Walnut and its derivatives

UW   Wheat and its derivatives

All other code values of the global GDSN code list are not relevant for food and therefore not listed here.

7.1.1   Optional allergen information

In addition, detailed allergen information on the species of fish can be provided for fish and its derivatives:

ABD   Tuna and its derivatives

ADF   Cod and its derivatives

ADK   Halibut and halibut derivatives

ADR   Salmon and salmon derivatives

etc.

7.2   Declarable additives

Beyond the purely textual communication of the declarable additives (see mandatory requirements), these can be communicated in the German target market profile in coded form in the field "Declaration obligatory" (additiveName) [M023] in the FoodAndBeverageIngredientModule. The following declarable additives can be derived from the FIC Regulation:

ATM   packed under a protective atmosphere

CSW   with sweetener(s)

CZS   with sugar(s) and sweetener(s)

CSP   contains a source of phenylalanine

CAP   contains aspartame (a source of phenylalanine)

CLE   excess consumption may produce laxative effects

LIQ   contains liquorice

LIB   contains liquorice – people suffering from hypertension should avoid excessive consumption

LSS   High caffeine content. Not recommended for children and pregnant or breastfeeding women.

LCS   Contains caffeine. Not recommended for children and pregnant or breastfeeding women.

CPH   with added plant sterols/with added plant stanols; triggers additional declarations.

NFA   defrosted

TWR   irradiated or treated with ionising radiation

ZAT   substitution of ingredients

ZEI   with added proteins

ZWA   with added water

FZG   formed meat

FIZ   formed fish

WNE   sausage casing not edible

ARO   flavouring(s)

RAR   smoke flavouring(s)

NAR   natural flavouring(s)

CQE   Quinine

CCF   Caffeine

GMO   contains genetically modified organisms

NAN   contains nano particles

The declarable additives are always indicated together with the field "Level of containment" [M024]. The following code value, among other things, can be selected there:

CONTAINS

XML example

The packaging note "Sausage casing not edible" is communicated in code form.

```
...
<additiveInformation>
        <additiveName>WNE</additiveName>
        <levelOfContainmentCode >CONTAINS</levelOfContainmentCode>
</additiveInformation>
...
```

7.3   Additive categories

Annex VII, Part C defines categories of food additives and food enzymes. These categories can also be communicated in code form.

ANTIOXIDANT	Antioxidant
RAISING_AGENT	Raising agent
EMULSIFIER	Emulsifier
COLOUR	Colour
FIRMING_AGENT	Firming agent
HUMECTANT	Humectant
BULKING_AGENT	Bulking agent
GELLING_AGENT	Gelling agent
FLAVOUR_ENHANCER	Flavour enhancer
SEQUESTRANT	Sequestrant
PRESERVATIVE	Preservative
FLOUR_TREATMENT_AGENT	Flour treatment agent
MODIFIED_STARCH	Modified starch
ACID	Acid
ACIDITY_REGULATOR	Acidity regulator
FOAMING_AGENT	Foaming agent
ANTI_FOAMING_AGENT	Anti-foaming agent
EMULSIFYING_SALTS	Emulsifying salts
STABILISER	Stabiliser
SWEETENER	Sweetener
PROPELLENT_GAS	Propellant gas
ANTI_CAKING_AGENT	Anti-caking agent

GLAZING_AGENT	Glazing agent
THICKENER	Thickener

GDSN mapping

The additive categories [M027] are likewise always indicated together with the field "Level of containment" [M028]. The following code values, among other things, can be selected there:

CONTAINS

FREE_FROM	Free from
MAY_CONTAIN	May contain traces of

XML example

The information "without the additives":

flavour enhancer

preservative

colour

shall be communicated in coded form.

```
...
<additiveInformation>
        <additiveName>FLAVOUR_ENHANCER</additiveName>
        <levelOfContainmentCode>FREE_FROM</levelOfContainmentCode>
</additiveInformation>
<additiveInformation>
        <additiveName>PRESERVATIVE</additiveName>
        <levelOfContainmentCode>FREE_FROM</levelOfContainmentCode>
</additiveInformation>
<additiveInformation>
        <additiveName>COLOUR</additiveName>
        <levelOfContainmentCode>FREE_FROM</levelOfContainmentCode>
</additiveInformation>
...
```

7.4 Analytical composition of mineral water

Based on EU law (Directive 2009/54/EC on the exploitation and marketing of natural mineral waters), the statement of the analytical composition of mineral waters giving their characteristic constituents is mandatory information. In Germany, the main constituents are defined according to the "Allgemeine Verwaltungsvorschrift über die Anerkennung und Nutzungsgenehmigung von natürlichem Mineralwasser vom 9. März 2001" (General Administrative Regulation on the Recognition and Use Authorisation of Natural Mineral Water of 9 March 2001). These are in particular the following constituents:

	Code value	Code list
Lithium (Li^+)	LI	NutrientTypeCodeOther
Sodium (Na^+)	NA	NutrientTypeCodeOther
Potassium (K^+)	K	NutrientTypeCodeVitaminMineral
Ammonia (NH_4^+)	AMMON	NutrientTypeCodeOther
Magnesium (Mg^{2+})	MG	NutrientTypeCodeVitaminMineral

	Code value	Code list
Calcium (Ca^{2+})	CA	NutrientTypeCodeVitaminMineral
Strontium (Sr^{2+})	SR	NutrientTypeCodeOther
Barium (Ba^{2+})	BA	NutrientTypeCodeOther
Manganese (Mn^{2+})	MN	NutrientTypeCodeVitaminMineral
Iron (Fe$^{2+/3+}$)	FE	NutrientTypeCodeVitaminMineral
Fluoride (F$^-$)	FD	NutrientTypeCodeVitaminMineral
Chloride (CI$^-$)	CLD	NutrientTypeCodeVitaminMineral
Bromide (Br$^-$)	BRD	NutrientTypeCodeOther
Iodide (J$^-$)	ID	NutrientTypeCodeVitaminMineral
Nitrite (NO$_2$$^-$)	NITRI	NutrientTypeCodeOther
Nitrate (NO$_3$$^-$)	NITRA	NutrientTypeCodeOther
Sulphate (SO$_4$$^{2-}$)	S4+	NutrientTypeCodeOther
Hydrogen carbonate (HCO$_3$$^-$)	G_HC	NutrientTypeCodeOther

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