

## **Origin Detailed Field Descriptions**

**GTIN** – This is the 14-digit Global Trade Item Number, and is the primary key for the Origin database. GTINs must be properly formed in accordance with GS1 standards for US Pharmaceutical products. That is, the GTIN must contain the product NDC in positions 4-13, use an indicator digit in position 1 with a value between 0 and 8, and contain a properly calculated check digit in position 14.

**NDC** – The 10 character National Drug Code issued by the Food and Drug Administration. This field should be provided with dashes, in either the 5-4-1, 5-3-2, or 4-4-2 format as appropriate for the product.

**NDC11** – This field contains the 11-digit version of the NDC, which is typically used in billing and electronic transactions. This is formed by removing the dashes from the 10 character NDC, and adding a zero to the left of the segment which is shorter than its maximum allowable length.

**Proprietary Name** – This is the brand name of the drug, if this is a branded product. If no branded name is available, then this field should contain the same value as the "Established Name" field.

**Established Name** – This is the "Established Name" of the product as defined in 21 U.S.C. § 352(e)(3):

(3) As used in subparagraph (1), the term "established name", with respect to a drug or ingredient thereof, means (A) the applicable official name designated pursuant to section 358 of this title, or (B), if there is no such name and such drug, or such ingredient, is an article recognized in an official compendium, then the official title thereof in such compendium, or (C) if neither clause (A) nor clause (B) of this subparagraph applies, then the common or usual name, if any, of such drug or of such ingredient, except that where clause (B) of this subparagraph applies to an article recognized in the United States Pharmacopeia and in the Homoeopathic Pharmacopoeia under different official titles, the official title used in the United States Pharmacopeia shall apply unless it is labeled and offered for sale as a homoeopathic drug, in which case the official title used in the Homoeopathic Pharmacopoeia shall apply.

**Product Description** – This is the description of the product commonly used in trade. This generally contains information about the product name, strength, form, and package size, such as "atorvastatin 10 mg tab 500".

**Quantity** – The total dosage units contained in one unit of the product as defined by the NDC. That is to say, total dosage units in an each, not the total dosage units included in the package level described by the GTIN.

**Dosage Form** – The dosage form of the product. This field may contain any value appropriate for describing a product form. Origin suggests the use of common abbreviations, such as "Tab" for tablets, or "Cap" for capsules.

**Strength** – The strength of the product included in each dosage unit.

**Packaging Level** – The packaging level described by the GTIN. Suggested values include Each and Case, but additional packing levels may be appropriate depending on the product.



**Contained GTIN** – This field indicates which GTIN is directly contained within the package described in the GTIN column. For packaging levels which do not contain another GTIN, this field should be left NULL. For higher packaging levels, this should contain only the GTIN directly included within the package, in accordance with the examples provided in the "Calculating Eaches" section of this document.

**Contained QTY** – This field indicates how many of the Contained GTIN are included within the package described in the GTIN column. See the "Calculating Eaches" section of this document for further examples.

Less Than Each – This is a flag which indicates that the GTIN represents a package smaller than the smallest saleable unit ("each") for the product. This may include, for example, individual vials of an injectable product which are only traded in trays containing several vials. In order to keep the entry of product data as simple as possible for contributors, this flag only needs to be set to 1 to indicate that a GTIN represents a packaging level smaller than the each. For most products, there will likely be no GTINs where this flag is set because they are not serialized at a "less-than-each" level. This field may be left NULL or set to zero to indicate that a GTIN is not a "less-than-each".

## **Calculating Eaches**

When viewing data about a GTIN, either through the web portal, or when downloading GTIN information from the system, an additional field will be added to the data, calculated by the system, which indicates the total Eaches contained in a GTIN. In order to calculate this number, the system will use the hierarchy implicit in the "Contained GTIN" and "Contained QTY" fields, as described in the following chart:

Product	GTIN-14	Description	Contained GTIN	Contained QTY	Calcuated: Total Eaches
XazzoMax Capsule 100mg	2 03 6140528891 5	Bottle of 100 capsules	<null></null>	<null></null>	1
XazzoMax Capsule 100mg	3 03 6140528891 2	Bundle of (4) 100-Capsule bottles	2 03 6140528891 5	4	4
XazzoMax Capsule 100mg	4 03 6140528891 7	Carton of (24) 100-Capsule bottles	2 03 6140528891 5	24	24
XazzoMax Capsule 100mg	5 03 6140528891 1	Carton of (10) Bundles of 100 Capsule bottles	3 03 6140528891 2	10	40
XazzoMax Capsule 100mg	8 03 6140528891 6	Case of (20) cartons of the above	5 03 6140528891 1	20	800



In the simple case, for any GTIN with a Contained GTIN the Total Eaches is equal to the Contained QTY times the Total Eaches of the Contained GTIN. For any GTIN with no Contained GTIN, the Total Eaches is equal to 1. Calculating Total Eaches for any GTIN is simply a matter of recursively descending the hierarchy until reaching the each.

## The less than each flag slightly changes matters in the following way:

Any GTIN with a Contained GTIN which itself is less than an each has a Total Eaches of 1. Also, any GTIN which is less than an each has a Total Eaches of 0. (That is to say, if Product A is less than an each, then it is zero Total Eaches. If Product B contains Product A, then Product B is one Total Each.)

This allows for the case where items contained within the each (such as vials within a tray, where the tray is the smallest saleable unit) are serialized, but not saleable. The GTIN for the tray in this example would have a Contained GTIN equal to the GTIN for a vial, but since the vial GTIN would be flagged less than each, the tray would have a Total Eaches of 1, as illustrated below:

Product	GTIN-14	Description	Contained GTIN	Contained QTY	Less than Each Flag	Calcuated: Total Eaches
InjectoRite 10mL	2 03 6140528891 5	10mL vial	<null></null>	<null></null>	TRUE	0
InjectoRite 10mL	3 03 6140528891 2	Tray of 10x10mL vials	2 03 6140528891 5	10	FALSE	1
InjectoRite 10mL	5 03 6140528891 1	Carton of (6) Bundles of 10x10mL trays	3 03 6140528891 2	6	FALSE	6
InjectoRite 10mL	8 03 6140528891 6	Case of (20) cartons	5 03 6140528891 1	20	FALSE	120