

GTIN Allocation Rules

made even easier

Based on the GS1 General Specifications Section 2.1. Version 7.1 - January 2007

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1. Allocating Global Trade Item Numbers

1.1. General Rule

A Global Trade Item Number (GTIN) is used to identify any item upon which there is a need to retrieve pre-defined information and that may be *priced* or *ordered* or *invoiced* at any point in any supply chain.

A separate unique GTIN is required whenever any of the pre-defined characteristics of an item are different in any way that is relevant to the trading process. The guiding principle is if the customer is expected to distinguish a new trade item from an old trade item and purchase accordingly, a new GTIN should be assigned.

Specific rules that apply to prevalent industry practices have been endorsed by the Global Commerce Initiative Board, for the Fast Moving Consumer Goods (FMCG) industry. These rules covering many common business cases can be found in Section 3 below. While all GS1 standards are voluntary, the rules are intended to drive normative practice within the FMCG sector.

1.2. Responsibility

1.2.1. Branded and Non-Branded items

The Brand Owner, the organisation that owns the specifications of the trade item regardless of where and by whom it is manufactured, is normally responsible for the allocation of the GTIN. On joining a GS1 Member Organisation, the member receives a GS1 Company Prefix which is for the sole use of the company to which it is assigned. The company prefix may not be sold, leased or given, in whole or in part, for use by any other company.

The Brand Owner is the organisation that owns the trade item specifications and may be:

• The manufacturer or supplier The company manufactures the trade item or has it manufactured, in any country, and sells it under its own brand name

• The importer or wholesaler The importer or wholesaler has the trade item manufactured, in any country, and sells it under its own brand name or the importer or wholesaler changes the trade item (for example by modifying the packaging of the trade item).

The retailer

The retailer has the trade item manufactured, in any country, and sells it under its own brand.

There are some exceptions as follows:

Non-Branded Items

Items without a brand name and generic items – not private labels - are still assigned GTINs by their manufacturer. As different manufacturers may supply items that appear identical to the consumer, it is possible that items that are apparently the same have different GTINs. Companies that trade in these items need to organise their computer applications (replenishment programs for example) to cope with this eventuality. Examples of items that sometimes have no brand are apples, plasterboard, candles, drinking glasses, etc. Customer Specific Items

When a trade item is made specifically for one trade customer and is orderable only by this customer, it is permissible for a GTIN to be assigned by the customer. In this case the GTIN should be formed from the customer's GS1Company Prefix.

Other Exceptions

If the Brand Owner does not assign a GTIN, the importer or another intermediary can assign an item a temporary GTIN. This would imply that the importer takes on the role of the Brand Owner and could, for example,

register the product upon a Data Catalogue. This temporary GTIN may be used until a GTIN is assigned in the normal way. Alternatively a retail organisation can assign an internal number, for use within its own stores only, to an item that does not yet have a GTIN assigned to it.

1.3. Guidelines for Allocating GTINs

1.3.1. Pre-defined characteristics

Although this list is not exhaustive, the basic pre-defined characteristics of a trade item include:

- The Product Name, Product Brand, and Product Description
- The trade item type and variety
- The net quantity of trade item (weight, volume, or other dimension impacting trade)
- If the trade item is a grouping, the number of elementary items contained, and their subdivision in sub-packaging units, the nature of the grouping (carton, pallet, box-pallet, flatpallet...)

A modification to any of the basic elements that characterise a trade item will usually lead to a change in the GTIN.

"Note: National, federal or local regulations may apply and take precedence. For example, in some industries such as healthcare, regulations or other requirements may dictate a new GTIN"

"Note: Typically the gross dimensions modifications that do not affect net trade item quantity or measure do not impact the GTIN assignment. However, if any gross dimension (e.g. length, depth, weight, etc) changes **by more than 20%** a new GTIN is required.

1.3.2. Prepriced merchandise

Prepricing is discouraged as a trade practice as it introduces complexity for trade item file maintenance through the supply chain. If however, the price that the consumer will pay is marked on the item, the GTIN should be changed when the priced marked on the item changes.

1.3.3. Promotional variants

A promotion is a temporary change to a trade item, which modifies the presentation of the trade item. It usually coexists with the standard trade item.

 Promotional variants of trade items that affect the net weight or volume of the trade item must be allocated a separate unique GTIN. Examples: Attached free additional item, 10% extra free.

- Promotional variants of trade items may impact the logistic weight or dimension of the trade item by more than 20%. In this case, the promotional variants must be allocated a separate unique GTIN.
- Promotional variants of trade items where a price reduction is explicitly specified on the pack (flash packs) must be allocated a separate unique GTIN unless local trade practices or price marking legislation dictate otherwise. Examples: 10 cents off.
- Each seasonal promotion of a trade item should be allocated a separate unique GTIN. Example: chocolate especially over-wrapped for Easter.
- Other promotional variants should not be allocated a separate unique GTIN.
 Examples: Money off coupon, free gift inside (unless this causes an increase in gross weight by more than 20%), "send for" offer, competition offer, or samples sent directly to consumer bypassing retail Point-of-sale.

1.3.4. Trade item changes

Trade item changes are any change or improvement during the life of a trade item. The "new" trade item replaces the old one. Should the Brand Owner decide to create a variant (e.g., with different ingredients) in parallel with the standard trade item, then a separate GTIN has to be allocated.

Minor trade item changes or improvements do not require the allocation of a different GTIN. Examples: label artwork redesign, minor trade item description changes that do not impact the supply chain, gross dimension change in any axis of less than 20% with content quantity or measure unchanged. This rule applies to retail consumer trade items (retail POS unit) and standard trade item groupings (orderable cases or pallets).

If a trade item's quantity or measure changes or if the consumer will be expected to distinguish between an old and new brand name or product description, then a new GTIN must be allocated.

1.3.5. Variants for groupings

Trade items which are a standard and stable grouping of smaller units identified by must be allocated a separate GTIN whenever there is a change to the GTIN of any of the units contained.

1.4. Lead Time in Re-using a GTIN

A GTIN allocated to a trade item, which has become obsolete must not normally be re-used for another trade item until at least 48 months have elapsed from the date the original trade item was last supplied by the Brand Owner to the customer.





1.5. Data Alignment

When a new GTIN is assigned to a trade item, it is essential that the Brand Owner provide the detailed information to trading partners about the item's characteristics. This information should be provided as soon as possible before the trade item is actually traded.

Expediting GTIN information to buyers reduces order exception handling and reduces the leadtime in getting goods to the selling floor.

1.5.1. Data Alignment Best Practice

A number of actions are vital to ensure that GTINs are accurately communicated within the Supply Chain. These ensure that the data associated with any scanned bar code can be associated with accurate, up to date, data. This is particularly essential for items scanned at the Point of Sale where the absence of accurate data may have legal implications.

The GTIN provides a Supply Chain solution for the identification of any item that is traded (priced or invoiced or ordered). Overall Supply Chain costs are minimised by all partners in the Supply Chain adhering to identical allocation rules.

The following 'Best Practices' guideline is proposed for all items. It has been developed by manufacturers, distributors and retailers to help eliminate any confusion between product identification and product listing in the Retailers Database in the Supply Chain.

- GTIN allocation, and the bar coding of the GTIN, is a technical process the rules for which are laid down in the GS1 General Specifications. Product listing is the act of adopting a new product in an assortment by a commercial organisation. Product listing is the result of commercial negotiations between purchaser and seller.
 Example: GTIN Allocation should be independent from Product Listing.
- 2. For management reasons, or to ensure that correct information is communicated to the final consumer, changes to an item may require a new GTIN. A new GTIN does not automatically imply a new listing. *Example: If a change requiring a new GTIN is made to a listed product, this should not be an automatic trigger for a new Product Listing.*
- 3. GTIN allocation and database listing are to be considered as two entirely autonomous decisions: GTIN allocation is not an object of negotiation.

4. The Brand Owner makes available to their client all information regarding the listed items, ideally with an EDI message or in an e-product catalogue, no later than at the time of item listing. In case of time limited promotions or a product evolution, this information will be communicated largely beforehand, thus allowing the retailer to validate this information and to circulate it internally.



2. Brand Ownership Changes

2.1. Acquisitions & Mergers

For the company being acquired, existing stocks on hand which are numbered before the acquisition or merger, keep the same GTIN Products that are produced after the acquisition or merger may keep the GTIN allocated before the acquisition if the acquiring company maintains the GS1 membership.

A merger implies that someone has taken over a company and has assumed responsibility for the company's GS1 Company Prefix, as well as, their assets and locations. Products that the acquired company produced under its GS1 Company Prefix can still be produced using the same prefix after the merger, since the acquiring company has full control.

If it so desires, the acquiring company can label all acquired products using their existing GS1 Company Prefix. The importance of ensuring trading partners are informed of any changes, in a timely manner, cannot be overemphasised. A company should be careful when centralising the allocation of all numbers under one GS1 Company Prefix as it results in additional work and data file maintenance for customers.

2.2. Partial Purchase

If a company purchases a division of a company whose GS1 Company Prefix is used in divisions not purchased, then the acquiring company must change the GTIN in the purchased division within one year.

The rules concerning the use of the seller's GTINs, and other GS1 Identification Keys, should be taken into consideration when drawing up the purchase contract.

At the earliest opportunity, the buyer should phase in new numbers, from its own range of numbers, for items whose brand name it has acquired. The buyer will be able to do this, for example, when packaging is redesigned or reprinted.

During a company sale, and for four years following, the selling company must not reallocate the original numbers to other items.

2.3. Split or Spin-Off

When a company splits into two or more separate companies it is necessary for each GS1 Company Prefix assigned to the original company to be transferred to only one of the new companies. Any company left without a GS1 Company Prefix will need to apply to a GS1 Member Organisation. The decision about which of the new companies should take the original GS1 Company Prefixes should be made in such a way as to minimise the number of additional GTINs required. The decision should be part of the legal arrangements of the new companies.

It is not necessary for existing stocks of items to be renumbered. However, when any of the split or spin-off companies has trade items that are numbered with a GS1 Company Prefix that it no longer holds, the company should renumber those items using its own GS1 Company Prefix when new labelling or packaging is produced. Customers should be notified well in advance of the changes.

Split or spin-off companies that retain a GS1 Company Prefix must keep a record of the GTINs created that have been allocated to items they no longer own. They must not re-use these GTINs for a period of at least four years after the company that split away owning those items last supplied goods identified by those GTINs. Therefore, the company that did not retain the GS1 Company Prefix has to keep the company that now maintains it informed of the dates on which goods were last supplied using that GS1 Company Prefix or to guarantee a date by which the number change will be made.

3. GTIN Allocation Rules – made even easier

3.1. Market Variants

Type of Change to Trade Item

New Language on a package sold in one Market/Country (single language label).



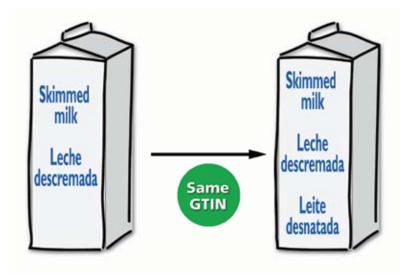
For example: An item packaging with text written in English that changes into Spanish.







Add an additional language on the packaging of a product sold in several Markets (multi language label).



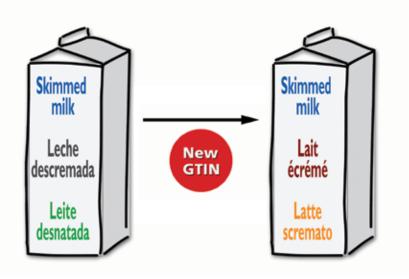
For example: An item of packaging with text written in English and Spanish that adds Portuguese.







Language Group Cluster Substitution.



For example: An item of packaging with text written in English, Spanish and Portuguese, that changes into English, French and Italian.







Sample or Test Trade items.



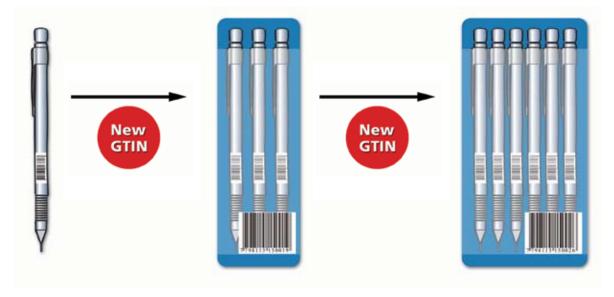
Note: If the trade item is released to market for POS use in any form it requires a GTIN. The GTIN used on the test/sample trade item can be maintained if the trade item test is successful and becomes orderable.







Groupings of same retail item containing different quantities.



Note: The GTIN of the contained item does not change, instead each grouping has an identifying GTIN.

GTIN for Standard Trade Item Grouping



Note: There are as many GTINs as groupings exist.





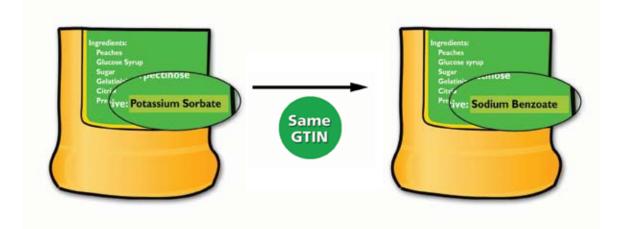
3.2. Replacement of Standard Trade Items Minor Changes

Minor changes are those which are not relevant to trading partners (e.g. neither the consumer declaration nor the ordering, billing or stocking information is impacted).

Manufacturers may need to distinguish these minor changes in trade items variant (e.g. for tracking price impact).

Type of Change to Trade item

Minor formulation change that will replace the existing trade item and does not involve any change in the declaration to the consumer.



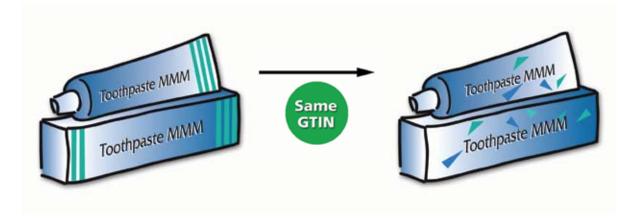
Note: The change has no impact on supply chain partners. Minor ingredient changes do not change the trade item description.







Minor artwork changes.



Note: Minor artwork changes, possibly associated with a trade item re-vamping or seasonal / promotional flow through, that do not impact other GTIN Rules, should not cause a new GTIN to be assigned.







Minor (not declared) change in net weight / count / volume (e.g. changes in manufacturing tolerances do not impact the declaration to the consumer).



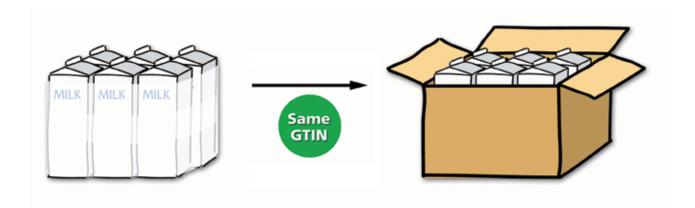
Note: The changes possibly associated with an improved product manufacturing or processing tolerance that do not impact other GTIN Rules, should not cause a new GTIN to be assigned.







Minor changes in the packaging, at the standard trade item grouping level.



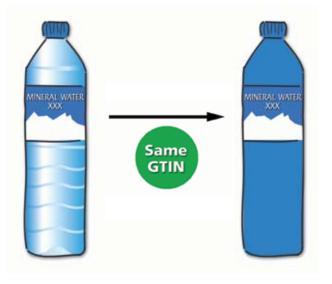
Note: This kind of changes has no impact on supply chain partners.







Minor packaging material changes on the retail consumer trade item level (e.g. PET to HDPE).



Note: This kind of change has no impact on supply chain partners.







When a retail consumer trade item or standard trade item grouping contains a random mix of trade item (e.g. different colours/flavours of jellies) and the random mix is modified.



Note: If the mix is random the change to a new random mix has no impact on the consumer declaration or supply chain partners.







Seasonal recipe (new line proposal) For example "Yoghurt with seasonal fruit": fruit can change from one season to the next.



Note: The consumer declaration remains the same whatever the season.







3.2.2. Major Changes

Major changes are those which require trading partners to distinguish, within their systems, between the "old" and "new" trade item (e.g., the consumer declaration has changed or the ordering, billing or stocking information is impacted).

Type of Change to Trade Item

A Dynamic Assortment is a standard trade item grouping that comprises a fixed count of a changing assortment of two or more different retail consumer trade items, each identified with a unique GTIN.



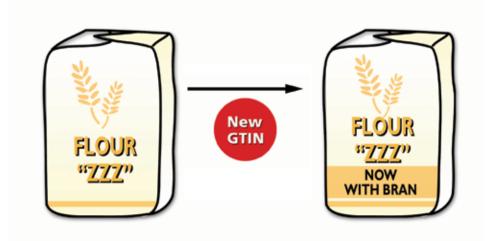
Note: The retailer has accepted that the assortment may be changed without notice.







Formulation change, expecting that the consumer distinguishes the new trade item from the old.



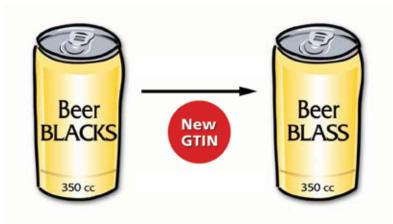
Note: The change leads to a change in the shelf edge label (consumer declaration).







Changes to the wording of existing product name or brand or the trade item description (declaration to the consumer).



Note: The change leads to a change in the shelf edge label (consumer declaration).







Any dimensional change, or gross weight change, of more than 20% in the item packaging.



Note: Shelf management software and logistic systems need to be updated to ensure optimal shelf space allocation.



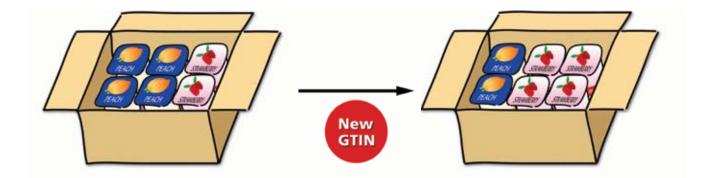




Changes in the configuration of grouping item assortments. (e.g. 30/50/80/40 change to 40/60/40/60).

IT DOES NOT APPLY for Retail Consumer Trade Item

GTIN for Standard Trade Item Grouping



Note: The standard trade item grouping is a new trade item for ordering purposes.

Major changes in functionality. For example: new software version.



Note: It is recommended that a new GTIN is assigned at both the retail consumer and standard trade item grouping levels to ensure all supply chain partners are able to distinguish the "old" from the "new".







3.3. Parallel Trade Items Promotions that do not impact GTIN

Promotions are (normally) short-term modifications to the way a trade item is presented to the customer. This section highlights examples of promotions where GTIN at retail consumer trade item level stays the same.

Type of Change to Trade Item

Two or more retail consumer trade items near each other (not attached or banded together) both of which can be purchased separately.



For example: A gift-with-purchase or buy-two, get one free offers.

GTIN for Standard Trade Item Grouping



Note: No change unless the two retail consumer trade items are shipped together in one physical package when originally they were shipped individually.





Two (or more) retail consumer trade items bound together, i.e. designed to promote the trial of the attachment (One-Order Trial Packs), where the packaging measures do not impact on the shelf managing.



Note: This kind of changes has no impact on supply chain partners.







Two retail consumer trade items, not attached or banded together where one item, which cannot be purchased separately, is free when the other is purchased.



Note: The change has no impact on the original item.

GTIN for Standard Trade Item Grouping



Note: Whenever the free item is not shipped in the same physical container.





A free item packed inside the primary retail consumer trade item package with no change in quantity of trade item and the promotion package is sold at the same price as the regular package.



Note: The change has no impact on supply chain partners.



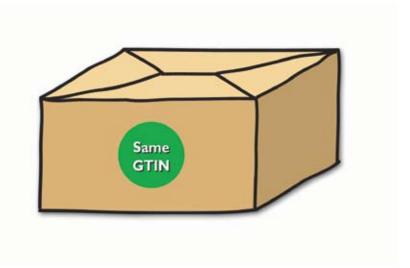




Reconfiguration of a consumer pack. A consumer package reconfigured for promotional purposes (e.g. anniversary cider edition).



Note: The change has no impact on supply chain partners. The consumer declaration is not changed.







Discount Coupon. A retail consumer trade item may have a discount coupon on or in the package.



Note: The change has no impact on pricing, ordering or invoicing. If the retail consumer is given the choice between purchasing the trade item with or without consumer discount coupons a separate GTIN is required.

GTIN for Standard Trade Item Grouping



Note: Whenever the coupon does not have an expiration date.





A retail consumer trade item may have a coupon or other identifiable printed matter that would offer proof of having purchased that item. The coupon would be returned by mail by the consumer for refund.



Note: If the coupon is time critical it should be treated as a new item.

GTIN for Standard Trade Item Grouping

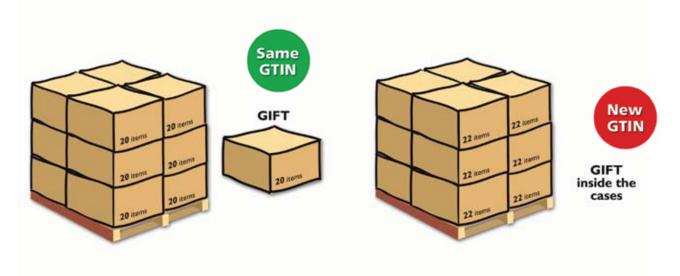


Note: Whenever the coupon does not have an expiration date.





When items are purchased by the retailer at the regular price, additional items are furnished free of charge.



Note: When the quantity of items is increased in a case, the GTIN changes.

GTIN for Standard Trade Item Grouping

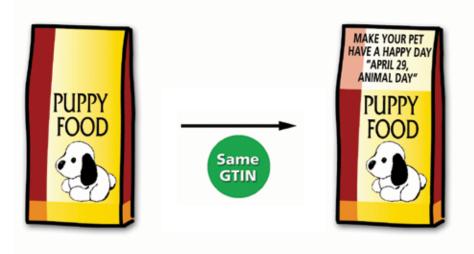


Note: If the quantity of regular cases is increased (e.g. buy ten cases and get one case free), there is no change in the standard trade item grouping GTIN.





Certain time critical promotion (e.g., World Animal Day) where the promotion item has to be on display on a given day.



Note: The change has no impact on supply chain partners. The consumer declaration is not affected.





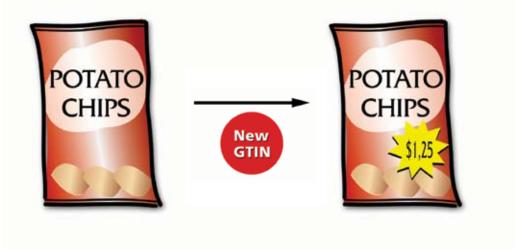


Promotions that do impact GTIN

Promotions are (normally) short-term modifications to the way a trade item is presented to the customer. This section highlights examples of promotions where a new GTIN is required at one level.

Type of Change to Trade Item

If a retail consumer trade item is changed to a retail consumer trade item that has a pricing statement on the label.



Note: The change requires supply chain partners to distinguish old and new stock.







Price reduction is explicitly specified on the pack of a retail trade item.



Note: The change requires supply chain partners to distinguish old and new stock.







A bonus pack is an item that has increased quantity (net weight, count, volume) and is sold at the same price as the regular item.



Note: Quantity increase affects unit pricing and information found on shelf labels.







Items, composed of two or more retail trade items normally sold separately, that are bound together.



Note: A new GTIN is required for the retail consumer trade item because it is a new and unique product.







Prepriced Merchandise

Prepricing is discouraged as a trade practice as it introduces complexity for retail consumer trade item and standard trade item grouping price file maintenance through the supply chain.

Type of Change to Trade Item

Retail Consumer Trade Item with price label attached per specific retailer(s) requirements.



Note: Retail consumer trade item where multiple retailers require specific price labelling does not require individual GTIN assignment per each price label.







When the manufacturer includes prepricing as part of the package graphics, such as is normally done with a Manufacturer's Suggested Retail Price (MSRP).



Note: The change requires supply chain partners to distinguish old and new stock.







When the selling price is marked on the packaging and the marked selling price is changed.









3.4. Other Parallel Trade Items

Other changes which could impact GTIN allocation.

Type of Change to Trade Item

Different manufacturer for an (apparently) identical trade item made for a specific retailer.



Note: The Retail Price is not relevant to the GTIN.







Different Retail Price (e.g., for different regions in one country) and the price is not marked on the packaging.



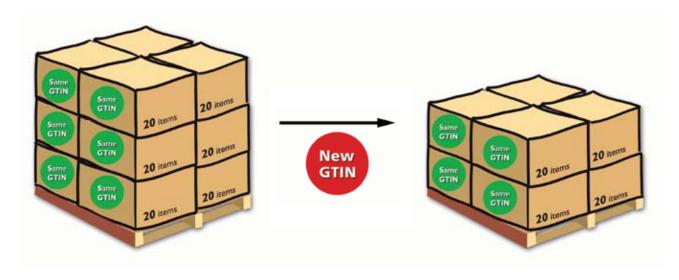
Note: The retail price is not relevant to the GTIN unless it is pre-priced by the supplier on the package.







New / additional pallet layout to co-exist permanently with the original layout.



Note: The pallet pattern / layout does not impact the quantity of retail consumer trade items or cases contained. If the pallet is an ordering unit a different GTIN is required for each pallet configuration.







Retail trade items presented with different EAS (Electronic Article Surveillance).



Note: The change has no impact on supply chain partners. The consumer declaration is not affected.



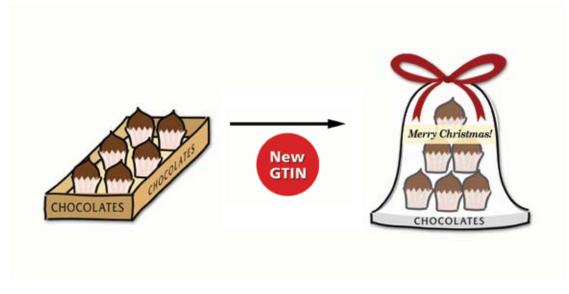




3.5. Seasonals

Type of Change to Trade Item

Trade items modified for seasonal reason (e.g. holiday pack, chocolate over-wrapped for Easter).



Note: A new GTIN is required-since it is a new item. Recurring seasonals should use the same GTIN each season.





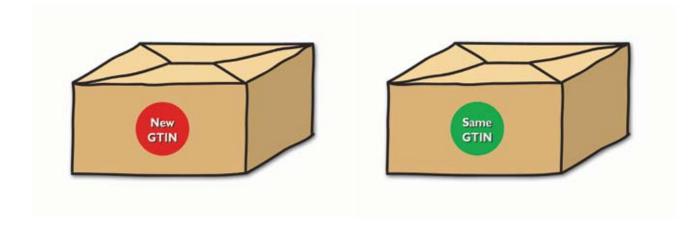


Trade item with different vintage (e.g. wine).



For example: New GTIN if the vintage impacts pricing. Same GTIN if the vintage has no impact on pricing.

GTIN for Standard Trade Item Grouping



Note: If the vintage impacts pricing.

Note: If the vintage does not impact pricing.





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Blue Tower Avenue Louise 326, b10 BE 1050 Brussels Belgium T +32 (0)2 788 7800 F +32 (0)2 788 7899 www.gs1.org