

Product Identification Terminology



Info

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This terminology has been cross-checked with the [APICS dictionary](#), and our intention is to stay aligned with APICS terminology for industry standard supply chain terms.

Introduction

The terminology found in this document is put forth with the intention to simplify and build useful community consensus when discussing products, and how those products are identified, in global health supply chains. Global health supply chains appear to be in the process of adopting more standardized supply chain terminology in addition to a rich history of legacy terminology, that's been in use in practice for sometime across various locations and organizations. This document will attempt to best capture, define and differentiate the most common and useful of these terms as is practical. This should be considered a living document with revisions made as needed.

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Commodity

Aka: Commodity Classification, Nomenclature, Classification

relates to: Product Master

Classifying products into commodities is useful in designating groups of products as fungible (i.e. interchangeable) with one another. Whether one product is fully fungible with another depends on how the definition of a commodity is defined. As a simplistic example we could for instance say that all Polio vaccines are a commodity. Doing so might be useful if we're analyzing an aggregation of polio vaccine stocking levels. We might however have a need, for example in re-supply planning, to differentiate between Oral Polio Vaccine (OPV) and Inactivated Polio Vaccine (IPV), and so our commodity definition might instead have one for OPV and another for IPV.

Products may be classified into many different systems and for different purposes (spend analysis, commodities, regulatory, etc) all at once. In global health we must be careful in understanding what we're using our classification for, and in the case of commodity classification what questions we are typically looking for our classification to help answer.

Some example questions (in no particular order):

- How much Ibuprofen do we have?
- How much have we spent on Ibuprofen?
- How much is about to expire?
- How many more packs of Ibuprofen 500mg Capsules should we order?
- How many more pallets should we order for next year?
- What brands of Ibuprofen could I procure from my supplier?
- Which brand(s) are registered with the regulatory body?

An important consideration in using any commodity classification system is the support of your supplier in also using that system to find new Items. If manufactured/branded goods (Items) don't classify themselves in the commodity classification system or that information isn't in use at your supplier, then the value of the commodity classification system decreases as you won't be able to quickly find new Items which may be ordered from your supplier for any particular commodity you're attempting to be re-supplied with.

For more on product classification in healthcare, see further GS1 Healthcare guidance on [Product Classification](#)

GHSC-PSM Product Master

Relates to: Commodity Classification

The GHSC-PSM Product Master is an extension of the commodity classification system UNSPSC. This extension should aid in group purchasing / procurement of health commodities at an international scale. To that end the Product Master extends the hierarchical UNSPSC commodity classification system a level down. That is it tends to add more differentiation to the commodities already in the UNSPSC, as opposed to attempting to expand into new commodities the UNSPSC doesn't have. This extension of adding more differentiation to the UNSPSC commodities tends to aid in procurement by adding typical active drug strengths (e.g. 200mg), form factors (e.g. pill, capsule), etc. These new differentiated commodity definitions should be useful for health procurement, though at the time of this writing the extension is still new.

Item

Aka Trade Item, normal item

A Item is any product which has a brand owner or manufacturer. A Item is by definition not a commodity - i.e. it's not a classification that exists in a Commodity Classification System. Rather an Item for global health products is a packaged product that sits on our store/warehouse shelf (where each packaging type would have a unique item identifier). Items typically are made in batches/lots and so if a batch/lot of an Item is recalled, that recall will apply to a more narrow set of products. For an inventory of Items to be effective, they need to be uniquely identified and the master data of that Item needs to properly classify the Item by the commodity classification system that we use in re-supply. In GS1 an Item is known as a GS1 Trade Item and is uniquely identified globally with a Global Trade Item Number (GTIN). The master data of a GS1 Trade Item is defined by the manufacturer/brand owner and is shared through the Global Data Synchronization Network (GDSN).

Commodity Orderable

Aka: Product, Orderable

Related: Commodity Classification, Item, Product Catalog

A Commodity Orderable is a hybrid concept of a Commodity and a Item. As the name implies, it is a Commodity that is Orderable/Requestable. What distinguishes a Commodity Orderable from most commodities is the addition of a couple more attributes which help facilitate the planning of the order /request. Typically we might expect these additional attributes to assist the commodity definition by adding a common packaging size, an estimated cost, etc. It's important to note that a Commodity Orderable is not a Item however, and therefore no manufacturer or brand owner would create identifiers for it, nor would any specific lot be definable for it.

See Product Catalog for a more complete example of Commodity Orderables in use.

Lot/Batch

A lot/batch differentiates where and when a particular commodity was made. A lot captures a certain number of products that were produced at a point in time at a location. A lot is captured as a number that is specific to the brand owner. Often times, the lot is associated with an expiration date. Lots and batches are synonymous.

Kit

Related: Commodity, Item

A Kit is a Product - it's an item that is defined once, and moves through the supply chain. It's not a part of the supply chain that moves items through the supply chain.

Master Data

Master data in this context refers to a single source of product data which is unique and fundamental to the procurement/resupply of Products for healthcare. For global health products master data typically refers to concepts such as unit of measurement, strength, route of administration, etc. Since health supply chains are global in nature, master data is data which comes from our suppliers/manufacturers/brand owners of those we get our Items from.

Product Catalog

aka Product List

A Product Catalog defines what may be ordered from a specific organization or through a specific program (e.g. Malaria, TB, etc). A Product Catalog differs from a Commodity Classification in that the items in a Catalog can be ordered and shipped and so ordering by package level (primary, case, pallet, etc) and by price is typically included.

For example if the Commodity Classification contains "Ibuprofen 200 mg Film-Coated Tablet", then the Product Catalog for the Central Medical Store might include two commodity orderables:

- A bottle of 50 tablets
- A bottle of 500 tablets

In practice most Product Catalogs found in IT systems often have a mix of items found in a Commodity Classification (e.g. Ibuprofen 200 mg Film-Coated Tablet), Commodity Orderables (e.g. Bottle of 50 Ibuprofen 200 mg Film-Coated Tablet), and Items (e.g. Bayer Bottle of 50 Ibuprofen 200 mg Film-Coated Tablet). This complicated state is often arrived at after IT requirements process identify needs from specific inventorying (Item) to assisted-resupply (Orderable) through to Procurement (Commodity Classification).

Product Code

relates to: Product Catalog, Master Product Code

A Product Code is a code that identifies a single product in a Product Catalog. Product codes are typically a byproduct of legacy coding schemes in use in paper processes or standalone IT systems. Since a Product Code is rarely shared across partners, it struggles to provide a unique identification across them. When two or more IT systems need to exchange data (EDI), product codes should not be used as the primary identifier as the master data behind the product codes quickly becomes unsynchronized across partners. In this case a Product Code may continue to serve as a shorthand secondary-identifier for use by people already familiar with them and within a standalone IT system. For EDI across systems and across partners, Orderables and Item coding should be used instead.

Master Product Code

aka Master Code, Item Master Code, Product Template Code

A Master Product Code is a unique identifier typically found in a Product Master or classification system. The coding's uniqueness will depend on the scope/reach of the system in use. E.g. UNSPSC defines a global system and so its codes are unique within that system globally.

Global Data Synchronization Network

aka GDSN

A Global Data Synchronization Network is the GS1 network of Product and Location data for trading partners. It allows manufacturers, brand owners and suppliers to publish their Master Data (Product Definitions) with globally unique identifiers. Products that are found on pharmacy shelves will be able to use the global identifier encoded in the barcode printed on the package to look up the published master data in the GDSN. By relying on the Product Definition published by manufacturer, brand owners and suppliers, subscribers can be sure that higher master data quality is available.

Product Registry

A Product Registry is an IT system that serves as a repository for cross-mapping (aka anchoring) legacy Product Codes to codes which are shared across partners - Commodity Orderable, Product Catalog, Item. A Product Registry also serves as a repository for other IT systems to be updated with the latest Product Catalogs. It fills a gap when there are many commodity classifications and product catalogs in use and when Global Trade Item Identifiers haven't yet been universally adopted for all packaging. Further it should serve as a stepping stone toward usage of GS1 and as a broker of GDSN master data to internal health IT systems.

SKU

aka Stock Keeping Unit

A SKU (Stock Keeping Unit), is an identifier used to distinguish and identify a product from others. SKU's are usually alpha-numeric and are not created by the manufacturer. Rather each merchant, warehouse, distributor, etc might create their own SKU. SKU's are usually not useful outside of the organization that creates them.