



Topco Associates, LLC
Data Synchronization Implementation Guide

Version 5



Data Synchronization Implementation Guide

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1 TOPCO ASSOCIATES DATA SYNCHRONIZATION INFORMATION

1.1 Primary Data Synchronization Contact

1WorldSync Customer Support:
+1 866.280.4013
businessdevelopment@1worldsync.com
technicalsupport@1WorldSync.com

Topco Associates Direct Support:
masterdata@topco.com

1.2 TOPCO ASSOCIATES GLN - Publish To

Production: **0036800000001**



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2 STEPS TO BEGIN SYNCING YOUR DATA WITH TOPCO ASSOCIATES

Implementation Steps

1. A full list of foodservice attribute requirements for GDSN is available for review in Section 3 of this document. If you are currently unable to provide the full list of attributes requested, please send what you have available today. You can send additional attributes as they become available. The Topco Playlist can be leveraged for 1WorldSync Item Management users.
2. Complete the **Trading Partner Form** on the Topco Associates landing page at <https://1worldsync.com/community/find-a-trading-partner/topco/>. This will trigger the data sync process.
3. Have your accurate item data loaded into your GDSN certified data pool and ensure it is ready for publication in Production.
 - a. Contact your data pool for any education you might require completing this step.
4. Publish a maximum of 5 items to Topco Associates GLN **003680000001**
 - a. Topco Master Data will review the publications and provide feedback on non-compliant items or any other issues with the item publications

Publication Steps

1. All Suppliers should publish **full catalog for all categories** and all item levels in your packaging configuration (hierarchy) Each, Inner Pack, Case, and Pallet to Topco Associates GLN **003680000001** in Production.
2. For the first publication Suppliers are to publish all products as "Initial Load".
3. To ensure Topco received your item publication, check that the sync status for each item published is listed as "Sent to Subscriber".
4. All item changes are required to be sent via the GDSN. Suppliers must email Topco at masterdata@topco.com when changes are sent so that the Topco Master Data team can validate the item changes.



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3 ATTRIBUTE REQUIREMENTS

Please note: If you are currently unable to provide the full list of attributes requested, please send what you have available today. You can send additional attributes as they become available. Attribute definitions can be found in the **Participant Dictionary**. To download the Participant Dictionary log into the 1WorldSync Solution Center, and download from the Implementation tab.

Key		
R	Required	Minimum subset of attributes that are required to pass all audits
CR	Conditional	Dependent attributes become GDSN Mandatory based on the population of another attribute, or based on the value populated for another attribute.
O	Optional	Additional attributes requested by Topco Associates

Core GDSN Attributes

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Information Provider GLN	informationProviderOfTradeItem	R	
Information Provider Name	nameOfInformationProvider	O	
GTIN	GTIN	R	14-Digit GTIN number
Data Carrier	dataCarrier	R	
Data Carrier Type Code	dataCarrier/dataCarrierTypeCode	R	
Product Type	tradeItemUnitDescriptor	R	
Brand Distribution Trade Item Type	brandDistributionTradeItemType	O	Categorization of the trade item to help further delineate product type with distribution type and trade channel.
Brand	brand Name	R	
Brand Owner GLN	brandOwner	O	Populate this field with the GLN used to identify the owner of the brand.
Brand Owner GLN Name	nameOfBrandOwner	O	Defaulted based on the brandOwnerGLN provided.
Alternate Item Identification	alternateItemIdentification	O	
Alternate Item Identification Agency	additionalTradeItemIdentificationTypeCode	CR	
Alternate Item Identification Id	additionalTradeItemIdentificationValue	CR	
Short Description / POS Desc. 1	descriptionShort	R	
Product Description	tradeItemDescription	R	
Additional Description	additionalTradeItemDescription	R	
Base Unit Indicator	isTradeItemABaseUnit	R	This level cannot have any lower levels.
Orderable Unit	isTradeItemAnOrderableUnit	R	This may be different from what the information provider identifies as a dispatch unit.
Consumer Unit Indicator	isTradeItemAConsumerUnit	R	
Dispatch Unit Indicator	isTradeItemADespatchUnit	R	
Invoice Unit Indicator	sTradeItemAnInvoiceUnit	O	
Country of Origin	tradeItemCountryOfOrigin	R	
Target Market	targetMarketCountryCode	R	



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Functional Name	functionalName	R	Should help clarify the product classification associated with the GTIN.
GPC Code	classificationCategoryCode	R	
GS1 Trade Item ID Key Code	gs1TradeItemIdentificationKey/code	CR	If gs1TradeItemIdentificationKey/value is not null, then gs1TradeItemIdentificationKey/code must not be null
GS1 Trade Item ID Key Value	gs1TradeItemIdentificationKey/value	CR	If gs1TradeItemIdentificationKey/code is not null, then gs1TradeItemIdentificationKey/value must not be null

Weights, Dimensions & Count

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Gross Weight	grossWeight	R	If attribute isTradeItemAService = "No" then the Gross Weight field becomes required
non GTIN Pallet Gross Weight	logisticsUnitGrossWeight	CR	If either Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) or Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null and Logistical Unit Gross Weight (logisticsUnitGrossWeight) is null, then WARNING: Logistical Unit Gross Weight (logisticsUnitGrossWeight) must not be null.
Qty of Next Level Item(s)	totalQuantityOfNextLowerLevelTradeItem	R	
Net Weight	netWeight	O	
Is Trade Item Packed Irregularly?	isTradeItemPackedIrregularly	O	Indicates that the item is packed in a non-rectilinear pattern such that it is not meaningful to send the number of child trade items in the width/depth/height.



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Is Non-GTIN Logistic Unit Packed Irregularly?	isNonGTINLogisticUnitPackedIrregularly	O	Is Non-GTIN Logistic Unit Packed Irregularly?
Net Content	netContent	O	Only required for the consumer unit or the EACH.
Variable Weight Trade Item	isTradeItemAVariableUnit	R	
Height	height	CR	<p>"If Product Type (productType) is PALLET (PL) or Display Ready Pallet (MX) and Height (height) is between 100 INH and 105 INH, then WARNNG: Check the Pallet height as it may not fit into a container or trailer for shipping.</p> <p>If Product Type (productType) is PALLET (PL) or Display Ready Pallet (MX) and Height (height) is greater than 105 INH, then PUBLCIATION IMPACT: This Pallet height will not fit into a container or trailer for shipping. Please recheck your measurements."</p> <p>Formulas for the TI/HI rules height > 101 INH <i>and</i> height < 105 INH height > 105 INH</p>
Width	width	R	
Depth	depth	R	



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
non GTIN Pallet Height	logisticsUnitHeight	CR	<p>If either Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) or Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null and Logistical Unit Height (logisticsUnitHeight) is null, then WARNING: Logistical Unit Height (logisticsUnitHeight) must not be null.</p> <p>If Logistical Unit Height (logisticsUnitHeight) is between 100 INH and 105 INH, then WARNNG: Check the Pallet height as it may not fit into a container or trailer for shipping.</p> <p>If Logistical Unit Height (logisticsUnitHeight) is greater than 105 INH, then PUBLCIATION IMPACT: This Pallet height will not fit into a container or trailer for shipping. Please recheck your measurements.</p>
non GTIN Pallet Width	logisticsUnitWidth	CR	<p>If either Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) or Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null and Logistical Unit Width (logisticsUnitWidth) is null, then WARNING: Logistical Unit Width (logisticsUnitWidth) must not be null.</p>



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
non GTIN Pallet Depth	logisticsUnitDepth	CR	If either Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) or Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null and Logistical Unit Depth (numberOfItemsPerPallet) is null, then WARNING: Logistical Unit Depth (logisticsUnitDepth) must not be null.
Volume	tradeItemMeasurements	CR	Mandatory on the case level and a CIC will be returned if it is missing or if a provided value is more than 12% out of tolerance with the calculated volume (from the dimensions) volume cannot be greater than (height * width * depth) * 12%
non GTIN Pallet Volume/Cube	logisticsUnitCubeDimension	O	The dimensions of an imaginary cube which can be drawn around both the unit load (content) and the platform upon which the goods are carried if there is one, as defined in the formula of H X W X D (the linear dimensions multiplied to get a cubic result).

Handling & Delivery



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Pallet Hi	hi	CR	<p>If ti is not null, then hi must not be null Where productType is PL or MX, hi must not be null Where productType is PL or MX, nonGTINPalletHi must be null</p> <p>If Product Type (productType) is PALLET (PL) or Display Ready Pallet (MX) use the result of [Height (height) / Number of Complete Layers Contained in Item/GTIN Pallet Hi (hi)] compare the result to each value for Height (height), Depth (depth), and Width (width) of the Child GTIN (link/childItem/gtin). If none of the measurements are less than or equal to the result, then WARNING: Check the measurements for this item's hierarchy. It is not possible for the child item to fit on the pallet. None of the Pallet's child item have a measurement which can fit in the stated pallet layer height.</p> <p>Formulas for the TI/HI rules</p> <p>(height / hi) > or = height {of link/childitem/gtin} (height / hi) > or = width {of link/childitem/gtin} (height / hi) > or = depth {of link/childitem/gtin}</p>



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Pallet Ti	ti	CR	<p>If hi is not null, then ti must not be null Where productType is PL or MX, ti must not be null</p> <p>Where productType is PL or MX, nonGTINPalletTi must be null</p> <p>If Product Type (productType) is PALLET (PL) or Display Ready Pallet (MX) find the pallet layer area, which is the product of [Depth (depth) * Width (width)]. Compare the pallet layer area to the 3 possible child areas of the Child GTIN (link/childItem/gtin) using these 3 formulas- [(Depth (depth) * Width (width)) * Number of Items in a Complete Layer/GTIN Pallet Ti (ti)] and [(Depth (depth) * Height (height)) * Number of Items in a Complete Layer/GTIN Pallet Ti (ti)] and [(Height (height)) * Width (width)) * Number of Items in a Complete Layer/GTIN Pallet Ti (ti)]. If none of these 3 child areas are less than or equal to the pallet layer area, then WARNING: Check the measurements for this item's hierarchy it is not possible for the child item to fit on a layer of this pallet. None of the Pallet's child items have a measurement which can fit in the stated layer's area.</p> <p>Formulas for the TI/HI rules</p> <p>(depth * width) > or = depth * width {of link/childitem/gtin} (depth * width) > or = depth * height {of link/childitem/gtin} (depth * width) > or = height * width {of link/childitem/gtin}</p>



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non GTIN Pallet Ti	nonGTINPalletTi	CR	<p>If nonGTINPalletTi is not null, then nonGTINPalletHi must not be null Where productType is CA or DS, ti must be null</p> <p>If Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null find the non GTIN pallet layer area, which is the product of [Logistics Unit Depth (logisticsUnitDepth) * Logistics Unit Width (logisticsUnitWidth)]. Compare the non GTIN pallet layer area to the 3 possible areas of the GTIN using these 3 formulas- [(Depth (depth) * Width (width)) * Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi)] and [(Depth (depth) * Height (height)) * Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi)] and [(Height (height) * Width (width)) * Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi)]. If none of these 3 areas are less than or equal to the non GTIN pallet layer area, then WARNING: Check the measurements for this item's hierarchy it is not possible for the item to fit on a layer of this non GTIN pallet. None of the Pallet's child items have a measurement which can fit in the stated non GTIN pallet layer's area.</p> <p>Formulas for the TI/Hi rules</p> <p>(logisticsUnitDepth * logisticsUnitWidth) > or = depth * width <i>(logisticsUnitDepth * logisticsUnitWidth) > or = depth * width</i> (logisticsUnitDepth * height) > or = depth * height <i>(logisticsUnitDepth * height) > or = depth * height</i> (logisticsUnitDepth * logisticsUnitWidth) > or = height * width <i>(logisticsUnitDepth * logisticsUnitWidth) > or = height * width</i></p>
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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
non GTIN Pallet Hi	nonGTINPalletHi	CR	<p>If nonGTINPalletHi is not null, then nonGTINPalletTi must not be null Where productType is CA or DS, hi must be null</p> <p>If Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) is not null find the nonGTIN pallet layer height which is the result of [Logistical Unit Height (logisticsUnitHeight) / Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi)]. Compare nonGTIN pallet layer height independently to the values for Height (height), Depth (depth), and Width (width) of the GTIN. If none of the measurements are less than or equal to the pallet layer height, then WARNING: Check the measurements for this item's Non GTIN Pallet. It is not possible for this item to fit on the nonGTIN pallet. None of this item's measurements will fit in the stated nonGTIN pallet layer's height.</p> <p>Formulas for the TI/HI rules</p> <p>(logisticsUnitHeight / nonGTINPalletHi) > or = height (logisticsUnitHeight / nonGTINPalletHi) > or = width (logisticsUnitHeight / nonGTINPalletHi) > or = depth</p>



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Number of Items/Pallet (NonGTIN)	numberOfItemsPerPallet	CR	If either Number of Complete Layers Contained in Item/Non GTIN Pallet Hi (nonGTINPalletHi) or Number of Trade Items Per Pallet Layer/Non GTIN Pallet Ti (nonGTINPalletTi) is not null and Number of Items/Pallet (numberOfItemsPerPallet) is null, then PUBLICATION IMPACT: Number of Items/Pallet (numberOfItemsPerPallet) must not be null.
Min Order Quantity	deliveryPurchasingInformationModule/deliveryPurchasingInformation/orderQuantityMinimum	R	
Min Product Lifespan from Arrival	minimumTradeItemLifespanFromArrival	R	
Min Product Lifespan from Production	minimumTradeItemLifespanFromTimeOfProduction	R	
Temperature Qualifier Code = STORAGE_HANDLING	temperatureQualifierCode	CR	<p>One instance of tradeItemTemperatureInformation/temperatureQualifierCode must be STORAGE_HANDLING</p> <p>If tradeItemTemperatureInformation/temperatureQualifierCode is not null, then either tradeItemTemperatureInformation/minimumTemperature OR tradeItemTemperatureInformation/maximumTemperature. Both can be populated as well.</p> <p>If tradeItemTemperatureInformation/minimumTemperature is not null, tradeItemTemperatureInformation/minimumTemperature must be Less than or equal to tradeItemTemperatureInformation/maximumTemperature</p>



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Maximum Temperature/UOM	maximumTemperature/uom	CR	<p>One instance of tradeItemTemperatureInformation/temperatureQualifierCode must be STORAGE_HANDLING</p> <p>If tradeItemTemperatureInformation/temperatureQualifierCode is not null, then either tradeItemTemperatureInformation/minimumTemperature OR tradeItemTemperatureInformation/maximumTemperature. Both can be populated as well.</p> <p>If tradeItemTemperatureInformation/minimumTemperature is not null, tradeItemTemperatureInformation/minimumTemperature must be Less than or equal to tradeItemTemperatureInformation/maximumTemperature</p> <p>tradeItemTemperatureInformation/maximumTemperature must be greater than or equal to tradeItemTemperatureInformation/minimumTemperature</p>



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Minimum Temperature/UOM	minimumTemperature/uom	CR	<p>One instance of tradeItemTemperatureInformation/temperatureQualifierCode must be STORAGE_HANDLING</p> <p>If tradeItemTemperatureInformation/temperatureQualifierCode is not null, then either tradeItemTemperatureInformation/minimumTemperature OR tradeItemTemperatureInformation/maximumTemperature. Both can be populated as well.</p> <p>If tradeItemTemperatureInformation/minimumTemperature is not null, tradeItemTemperatureInformation/minimumTemperature must be Less than or equal to tradeItemTemperatureInformation/maximumTemperature</p> <p>tradeItemTemperatureInformation/maximumTemperature must be greater than or equal to tradeItemTemperatureInformation/minimumTemperature</p>
Effective Date	effectiveDate	R	
Packaging Marked Returnable	packagingMarkedReturnable	R	
Discontinued Date Time / Canceled Date Time	discontinuedDateTime/canceledDateTime	CR	<p>If cancelDate is not null, then discontinuedDate must be null</p> <p>If discontinuedDate is not null, then cancelDate must be null</p>
Product Marked Recyclable	productMarkedRecyclable	R	
National Brand Equivalent Description	topcoNationalBrandEquivalent/nationalBrandEquivalentDescription	O	Topco specific attribute to denote an understandable and useable description of a trade item using brand and other descriptors of an equivalent national product for this Topco private label product.



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
National Brand Equivalent GTIN 12	topcoNationalBrandEquivalent/nationalBrandEquivalentGTIN12	O	12-digit consumer UPC code for the National Brand Target Required for TOPCO labels
National Brand Equivalent Name	topcoNationalBrandEquivalent/nationalBrandEquivalentGTIN12	O	Topco specific attribute to denote the GTIN-12 (UPC) of an equivalent national product for this Topco private label product.
National Brand Equivalent Size	topcoNationalBrandEquivalent/nationalBrandEquivalentNetContent	O	Topco specific attribute to denote the net content of an equivalent national product for this Topco private label product. Only required for the consumer unit or the EACH. The amount of the trade item contained by a package, usually as claimed on the label. Example: Mineral Water 750ml - net content = 750 ML; 20 count pack of diapers, net content = 20 1N (Count); (GUI) or 'true' (Batch).
National Brand Equivalent Size UOM	topcoNationalBrandEquivalent/nationalBrandEquivalentNetContent	O	Topco specific attribute to denote the net content of an equivalent national product for this Topco private label product. Only required for the consumer unit or the EACH. The amount of the trade item contained by a package, usually as claimed on the label. Example: Mineral Water 750ml - net content = 750 ML; 20 count pack of diapers, net content = 20 1N (Count); (GUI) or 'true' (Batch).
Retail Container Type	topcoPackagingTypeCode	R	This is the Container of the Retail Item Can have more than one value (Example BOTTLE and CAP or JAR and LID) VV are required to get this into our system

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
First Order Date	deliveryPurchasingInformationModule/deliveryPurchasingInformation/firstOrderDateTime	O	Indicates the earliest date that an order can be placed for the trade item.
Packaging Marking Language	packagingMarkingLanguage	O	The language(s) in which texts are stated in on the product.



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Regulatory Information (PROP 65)	regulatoryInformation	0	Information on applicable government regulations a trade item is in compliance with.
Is Packaging Marked With Regulatory Compliance (PROP 65)	regulatoryInformation/isPackagingMarkedWithRegulatoryCompliance	0	Indicator of whether the packaging is marked with a regulatory compliance code.
Regulation Restrictions and Descriptors (PROP 65)	regulatoryInformation/regulationRestrictionsAndDescriptors	0	A textual detail needed by trading partners that explains any restrictions and/or descriptors explaining any information helpful about a regulation.
Regulation Type Code (PROP 65)	regulatoryInformation/regulationTypeCode	0	A code that indicates that a trade item is in compliance with specific applicable government regulations.
Regulatory Act (PROP 65)	regulatoryInformation/regulatoryAct	0	The name given to the requirement assigned by the regulatory agency.
Regulatory Agency (PROP 65)	regulatoryInformation/regulatoryAgency	0	The required information is the name of the specific entity in charge of issuing the permit to a company.
Non Food Ingredient Statement (Sequenced)	nonfoodIngredientStatement	0	Information on the constituent non-food ingredient make-up of the product specified as one string.
Sequence Number	nonfoodIngredientStatement/sequenceNumber	0	Sequence Number for Non Food Ingredient Statement
Non Food Ingredient Statement Message	nonfoodIngredientStatement/statement	0	Information on the constituent ingredient make-up of the product as specified for non-food items.
Warning Copy Descriptions	warningCopyDescriptions	0	Warning Copy Descriptions
Warning Copy	warningCopyDescriptions/warningCopyDescription	0	Warning information is additional information that outlines special requirements, warning and caution information printed on the package. E.g., Adverse Event Reporting Agreement (AERA), Contains Pseudoephedrine (PSE), Contains Dextromethorphan (DXM)



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Allergens:

A trade item must specify the following GDSN attributes for each of the "Big 8" allergens for at least one level within the item hierarchy: allergenTypeCode & levelOfContainment

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Allergen Related Information	allergenRelatedInformation	0	
Allergen	allergenRelatedInformation/allergen	0	
Allergen Type Code	allergenRelatedInformation/allergen/allergenTypeCode	0	
Level Of Containment	allergenRelatedInformation/allergen/levelOfContainmentCode	0	
Allergen Relevant Data Provided?	allergenRelatedInformation/isAllergenRelevantDataProvided	0	

Allergen Type Codes:

Below is a list of the required "Big 8" Allergens. The attribute "Allergen Type Code" is a coded attribute, so please reference the associated code listed below.

Allergen Type Codes	
AM	Milk and its derivatives
AS	Sesame Seeds and their derivatives
AY	Soybeans and their derivatives
AN	Nuts and their derivatives
UW	Wheat and its derivatives
AC	Crustaceans and their derivatives
AE	Eggs and their derivatives
AF	Fish and their derivatives



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Nutrient Type Code:

**All Nutrient Type Codes are from the list of the INFOODS food component tag names identifying nutrients contained in the product. The percentage of the recommended daily intake of a nutrient as recommended by authorities of the target market.
(<http://www.fao.org/infoods/infoods/standards-guidelines/food-component-identifiers-tagnames/en/>)

Nutritional Facts Panel - should be displayed using the below attributes:

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Serving Size	servingSize	O	
Serving Size/ Measurement Unit Code	servingSize/@measurementUnitCode	R	
Servings per Package	numberOfServingsPerPackage	O	
Preparation State Code (Nutrition Facts)	preparationStateCode	R	
Measurement Precision Code (Nutrition Facts)	measurementPrecisionCode	O	
Nutrient Type Code* (Nutrition Facts)	nutrientTypeCode	R	
Daily Value Intake Percent (Nutrition Facts)	dailyValueIntakePercent	O	
Quantity Contained (Nutrition Facts)	quantityContained	O	
Quantity Contained/ Measurement Unit Code (Nutrition Facts)	quantityContained/@measurementUnitCode	R	

*The data attribute "nutrientTypeCode" is a coded value. Use the below table to reference the list of Nutrient Type Codes and preferred Units of measure.

Nutrient	Nutrient Type Code	Quantity Contained	Nutrient	Nutrient Type Code	Quantity Contained
Potassium	K	MGM	Biotin	BIOT	MC
Total Carbohydrate	CHO-	GRM	Pantothenic Acid	PANTAC	MGM
Dietary Fiber	FIBTSW	GRM	Phosphorus	P	MGM
Soluble Fiber	FIBSOL	GRM	Iodine	ID	MC
Insoluble Fiber	FIBINS	GRM	Magnesium	MG	MGM
Sugars	SUGAR-	GRM	Zinc	ZN	MGM
Sugar Alcohol	POLYL	GRM	Copper	CU	MGM



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Protein	PRO-	GRM	Total Calories	ENER-	D70/KJO
Vitamin A	VITA-	MC/NIU	Calories from Fat	ENERPF	D70/KJO
Calcium	CA	MGM	Calories from Sat Fat	ENERSF	D70/KJO
Iron	FE	MGM	Total Fat	FATNLEA	GRM
A-Beta Carotene	CARTB	MGM	Transfatty Acids	FATRAN	GRM
Vitamin D	VITD-	MC	Saturated Fat	FASAT	GRM
Vitamin E	THIA	MGM	Polyunsaturated Fat	FAPU	GRM
Riboflavin	RIBF	MGM	Monounsaturated Fat	FAMS	GRM
Niacin Vitamin B	NIA	MGM	Cholesterol	CHOL-	MGM
Folate	FOL-	MC	Sodium	K	MGM
Vitamin B 12	VITB12	MC	Vitamin C	VITAC-	MGM

Images

At least one primary image is required for each item record. Images must be in compliance with GS1 image standards, shown below. More information can be found here:

https://www.gs1.org/sites/default/files/docs/gdsn/Product_Image_Specification.pdf

Taking the Image

Definition of Product Image URL: The Uniform Resource Locator (URL) for the high-resolution product image that clearly depicts the primary selling surface of the product. Retailers should be able to use the image to authenticate the identity of the item.

Assumptions are that the primary selling surface is equivalent to the functional front of the product or the Default Front of the item as outlined in the GS1 Package Measurement Rules (Section 4.2) and the GS1 Product Image Specifications (Section 1.1).

Please consult your camera manufacturer (smartphone or other) or Solution Provider for these settings before capturing any images.

Naming the Image

To name the product image file, follow these guidelines:

Example: 00012345678905_C1C1.tiff

GTIN	Global Trade Item Number: 14-digit format	00012345678905
Separator	Underscore	-
Image Type	Product Image (High Resolution)	C
Facing	Front	1
Angle	Center	C
State	In Package	1

The following are GS1 Product Image Specifications (Section 2.6, 2.7, and 2.8) that need to be followed:

Image Type: Product Image (High Resolution)

Size Range (pixels): 2401 x 2401 - 4800 x 4800

Resolution: 300 ppi

Format: JPG, PNG, GIF, TIFF

Color Mode: RGB

Clipping Path: Required

Aspect Ratio: 1:1 Square

Background: White (RGB: 255/255/255)

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Image - Primary Image	externalFileLink/primaryImage	R	



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Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Image - External File Link	externalFileLink	O	
Image - File Name	externalFileLink/externalFileLinkFileName	O	
Image - File Format Name	externalFileLink/fileFormatName	O	
Image - File Effective End Date	externalFileLink/fileEffectiveEndDateDateTime	CR	If both externalFileLink/fileEffectiveEndDateDateTime and externalFileLink/fileEffectiveStartDateDateTime are not null, then externalFileLink/fileEffectiveEndDateDateTime must be greater than or equal to externalFileLink/fileEffectiveStartDateDateTime
Image - File Effective Start Date	externalFileLink/fileEffectiveStartDateDateTime	CR	If both externalFileLink/fileEffectiveStartDateDateTime and externalFileLink/fileEffectiveEndDateDateTime are not null, then externalFileLink/fileEffectiveStartDateDateTime must be less than or equal to externalFileLink/fileEffectiveEndDateDateTime
Image - Referenced File Type Code		CR	<p>If isConsumerUnit is true, and neither dam/general/typeOfInformation nor externalFileLink/typeOfInformation is PRODUCT_IMAGE or OUT_OF_PACKAGE_IMAGE, then WARNING: It is recommended to have at least 3 instances of either dam/general/typeOfInformation or externalFileLink/typeOfInformation with a value of PRODUCT_IMAGE or OUT_OF_PACKAGE_IMAGE with at least 1 instance of either dam/general/typeOfInformation or externalFileLink/typeOfInformation with a value of PRODUCT_IMAGE.</p> <p>If externalFileLink/typeOfInformation is not null, then externalFileLink/uniformResourceIdentifier must not be null</p>



Data Synchronization Implementation Guide

Topco Attribute Name	Global Data Dictionary Tag	Attribute Required	Additional Comments
Image - Uniform Resource Identifier		CR	<p>If isConsumerUnit is true, and neither dam/general/typeOfInformation nor externalFileLink/typeOfInformation is PRODUCT_IMAGE or OUT_OF_PACKAGE_IMAGE, then WARNING: It is recommended to have at least 3 instances of either dam/general/typeOfInformation or externalFileLink/typeOfInformation with a value of PRODUCT_IMAGE or OUT_OF_PACKAGE_IMAGE with at least 1 instance of either dam/general/typeOfInformation or externalFileLink/typeOfInformation with a value of PRODUCT_IMAGE.</p> <p>If externalFileLink/typeOfInformation is not null, then externalFileLink/uniformResourceIdentifier must not be null</p>



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REVISION HISTORY

Date	Ver #	Description of Change	Author
06-19-2017	1	Initial document	B. Curran
08-07-2017	2	Reformat attribute section	J. Nelson
07-06-2018	3	Removed Spec page & CIC reference	J. Nelson
11-04-2019	4	Image Specs & Private Label Attributes	E. Mokate
02-09-2022	5	Updated Attribute Requirements & Added Item Maintenance Process Requirements	B. Curran