



Retail ASN X12 Structure Hierarchy

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Introduction

Amazon's EDI business requirements and specifications have always required vendors to provide the EDI ASN that matches the physical ASN. In this document we are going to particularly highlight the packaging hierarchies and selling partners have to pay attention to as they ship palletized loads to Amazon. Keep in mind these are not new requirements we are just laying these out here to draw attention. We encourage you to review our full specifications and requirements can be found [here](#).

For questions on labeling for Pallets and/or Packages, reference the [North America Vendor Manual](#).

Retail ASN Hierarchies Supported

The ASN structures supported by Amazon are detailed below. The Retail business program expects the ASN (EDI856) to define the ordered item with the correct EDI Hierarchical Structure to maximize accuracy at Amazon receive process. The shipment hierarchies Amazon supports are:

- Palletized Assortment (**SOTPI and SOTI**)
- Loose Assortments - Shipment, Order, Package, Item (**SOPI**)
- Note, these formats can be combined to a "Blended format".

For further details, reference the below resources:

- Vendor Central interactive training (choose a format): Vendor Central > Main Menu > Learn > Learning Hub > Operations > Shipments > EDI/API Creation and Best Practice
- EDI Specifications Package:
 - Sample Files
 - Excel file – Match Physical Shipment to Format
 - FAQs

The item refers to the Hierarchy level of the ordered item, as defined in the related purchase order. The item will have a unique identifier which is defined during catalog onboarding.

Key considerations for shipments with Palletized Assortment

Please be advised that the below recommendations are not new and are already part of our specification.

Pallet count: Program expects the ASN(EDI856) to follow either [SOTPI](#) or [SOTI](#) shipment hierarchies for Palletized Assortments, along with providing the valid Pallet count. Please refer to section [EDI Structure SOTPI](#) / [EDI Structure SOTI](#) to understand how to provide '**PLT**' count

Seal Numbers: To ensure shipment integrity and chain of custody, all truckload and intermodal shipments must be sealed with ISO 17712 compliant metal, plastic, or wire seals before the truck leaves the dock. Seals must be applied by the vendor and not by the driver. Starting Oct-2023, Amazon will require ISO Compliant RFID Cable seals. Your ASN must include the corresponding '**Seal Number**'. Please refer to section [EDI Structure SOTPI](#) / [EDI Structure SOTI](#) to understand how to provide '**Seal Number**'.

ARN Number: Program expects the ASN(EDI 856) to have '**Amazon Reference Number**' (ARN NUMBER) for WePay vendors. Please refer to section [EDI Structure SOTPI](#) / [EDI Structure SOTI](#) to understand how to provide '**ARN Number**'

S-O-T (Pallet) - P (Pack) - I (Item)

The **SOTPI** ASN structure is generally used when the procured item is present inside a packing container, a carton, and placed on a pallet (see Fig A). The pallet has to contain a SSCC Label (scannable barcode). The packing carton is defined as a pack level (P). The item being procured on the PO is defined in the item level (I). This format can be used for shipments that contain a package SSCC or an approved non LP label such as a GTIN14 or 2D-BPS. Refer to the ASN X12 856 Spec package Sample Files and X12 856 ASN Format Example file for further examples and use-cases.

The below **Fig A** depicts:

- Product in this example refers to a single unit of the item.
- Carton refers to the packing container which encloses the procurable item.
- The carton (packing container) is stacked in a Pallet.

The Pallet SSCC label and carton SSCC label are required.



Fig A - SOTPI Levels

EDI Structure SOTPI

ASN Levels	Segments Included
Header Level	BSN*00*UNIQUE ASN ID*DATE*011147*0001~
Hierarchical SHIPMENT Level	HL*1*S~
	TD1*CTN*2****G*30*LB~ [TOTAL CARTON COUNT]
	TD1*PLT*2~ [TOTAL PALLET COUNT]
	TD5**2*SCAC~
	REF*BM*BOL NUMBER~
	REF*CN*PRO NUMBER~
	REF*BX*ARN NUMBER~ [For Collect Shipments]
	REF*SN*SEAL NUMBER~ [For FTL Shipments]
	DTM*011*SHIPPED DATE~
	DTM*017*ESTIMATED DELIVERY DATE~
	FOB*CC~
	N1*SF*VENDOR NAME*15*LOCCODE~
	N4*City*ST*NNNNN*US~
	N1*ST*AMAZON.COM*15*1553992~
	N4*NEW CASTLE*DE*19720*US~

Hierarchical ORDER Level	HL*2*1*O~
	PRF*PO NUMBER~
Hierarchical PALLET Level	HL*3*2*T~
	TD1*CTN* CARTON COUNT IN PALLET ****G*WEIGHT*LB~
	MAN*GM*SSCC PALLET LABEL~
Hierarchical PACK Level	HL*4*3*P~
	MAN*GM* SSCC CARTON LABEL ~
Hierarchical ITEM Level	HL*5*4*I~
	LIN*1* PROD QUAL *PRODUCT ID~
	SN1**30*EA~

S-O-T (Pallet) - I

The **SOTI** ASN structure is used when the items are placed on a pallet directly. This format is also used when sending packages with approved non-LP labels such as GTIN14 or 2D-BPS. See Fig. B where the ordered item(case) resides on a pallet.



Fig B - Procured Item's on a Pallet

- Pallet or Tare (T) has to contain a SSCC Label.
- SSCC Pallet shows the number of orderable cases/outer containers present in the pallet when listing a quantity in Eaches.

EDI Structure SOTI

ASN Levels		Segments Included
Header Level		BSN*00*UNIQUE ASN ID*DATE*011147*0001~
Hierarchical SHIPMENT Level		HL*1*S~
		TD1*CTN*300****G*300*LB~ [TOTAL CARTON COUNT]
		TD1*PLT*15~ [TOTAL PALLET COUNT]
		TD5**2* SCAC ~
		REF*BM*BOL NUMBER~
		REF*CN*PRO NUMBER~
		REF*BX*ARN NUMBER~ [For Collect Shipments]

	REF*SN*SEAL NUMBER~ [For FTL Shipments]
	DTM*011*DATE~
	DTM*017*DATE~
	FOB*CC~
	N1*SF*VENDOR NAME*15*LOCCODE~
	N4*City*ST*NNNNN*US~
	N1*ST*AMAZON.COM*15*1553992~
	N4*NEW CASTLE*DE*19720*US~
Hierarchical ORDER Level	HL*2*1*O~
	PRF*PO NUMBER~
Hierarchical PALLET Level	HL*3*2*T~
	TD1*CTN* CARTON COUNT IN PALLET ****G*WEIGHT*LB~
	MAN*GM* SSCC PALLET LABEL ~
Hierarchical ITEM Level	HL*4*3*I~
	LIN*1*PROD QUAL*PRODUCT IDENTIFIER~
	SN1**300*EA~

S-O- P (Pack) - I (Item)

The SOPI should be used when the item is placed in a loose assortment packing structure e.g. loose carton. The Item resides on a container defined in the pack level of the EDI Message. Each packing structure (P) must have a SSCC or valid tracking number. The loose assortment is primarily applicable for shipments fulfilled by small parcel carriers to Amazon.

Do not use this structure for Palletized Assortments. Palletized shipments must use a format with a Tare (Pallet) loop included.

EDI structure for SOPI

ASN Levels	Segments Included
Header Level	BSN*00*UNIQUE ASN ID*DATE*011147*0001~
Hierarchical SHIPMENT Level	HL*1**S~
	TD1*CTN*2****G*30*LB~ [TOTAL CARTON COUNT]
	TD5**2* SCAC ~
	REF*BM* BOL NUMBER ~
	REF*CN* PRO NUMBER ~
	REF*BX* ARN NUMBER ~ [For Collect Shipments]
	DTM*011* SHIPPED DATE ~
	DTM*017*ESTIMATED DELIVERY DATE~
	FOB*CC~
	N1*SF*VENDOR NAME*15*LOCCODE~
	N4*City*ST*NNNNN*US~
	N1*ST*AMAZON.COM*15*1553992~
	N4*NEW CASTLE*DE*19720*US~
Hierarchical ORDER Level	HL*2*1*O~

	PRF*PO NUMBER~
Hierarchical PACK Level	HL*3*2*P~
	MAN*GM* SSCC CARTON LABEL ~
	REF*CN*TRACKING NUMBER~
Hierarchical ITEM Level	HL*4*3*I~
	LIN*1* PROD QUAL *PRODUCT ID~
	SN1**30*EA~