TRACELINK UNIVERSITY

Advance ship notice (X12)

Shipment notices allow companies to exchange serialized data for sales shipments with upstream and downstream supply chain trade partners without giving these trade partners access to their serialization system of record. These shipment notices can be used to inform their Partners of the contents of a shipment, and the notices also allow these companies to comply with government regulations or recommendations for sharing serialized data about shipments.

The Advance Ship Notice (ASN) X12 message sends data about a purchase order the supplier is fulfilling and notifies the buyer of the pending goods delivery.

Contact your TraceLink Services representative for more information about integrating with this message.

- **Message Type**: MPC_ADVANCE_SHIP_NOTICE (Advanced Ship Notice)
- **X12 Format**: 856
- **Transform Names**:
  - B2B_EDI_X12_856_AdvanceShipNotice_IB_V7
  - B2B_EDI_X12_856_AdvanceShipNotice_OB_V9

Guidelines

Input Element	Occurs	Length	Description	Example
ISA	1...1	-	**Required.**ISA interchange envelope. All ISA envelope elements are required.	-

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Input Element		Occurs	Length	Description	Example
	ISA01	1...1	2/2	**Required.**Authorization information qualifier code identifying the type of authorization information in the ISA02. Valid values: • `00` – No authorization info present. • `03` – Additional data identification.	00
	ISA02	1...1	10/10	**Required.**Information used for additional identification or authorization of the interchange sender or the data in the interchange as defined by the qualifier in ISA01.	–
	ISA03	1...1	2/2	**Required.**Qualifier for security information in ISA04. Valid values: • `00` - No security information present. • `01` - Password.	00
	ISA04	1...1	10/10	**Required.**Security information used to identify the interchange sender or the data in the interchange, as defined by the security information qualifier in ISA03.	–
	ISA05	1...1	2/2	**Required.**Interchange sender partner ID qualifier.	01
	ISA06	1...1	15/15	**Required.**EDI sender ID defined by qualifier in ISA05.	2222224043588
	ISA07	1...1	2/2	**Required.**Interchange sender partner ID qualifier.	ZZ
	ISA08	1...1	15/15	**Required.**EDI receiver ID defined by qualifier in ISA07	TRACELINK
	ISA09	1...1	6/6	**Required.**Interchange date in 6 char YYMMDD format	240520
	ISA10	1...1	4/4	**Required.**Interchange time in 4 char HHMM format	1420
	ISA11	1...1	1/1	**Required.**This value is dependent on X12 version. • `004012` – Interchange control standards identifier. The valid value is U. • `004020 and later` – Repetition separator, a delimiter that separates repeated occurrences of a data element or composite data structure, which must be different from the data element separator, component separator, and segment terminator.	U
	ISA12	1...1	5/5	**Required.**Interchange control version number. This could be any X12 version.	00401
	ISA13	1...1	9/9	**Required.**Interchange control number.	0000000000619827

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Input Element		Occurs	Length	Description	Example
	ISA14	1...1	1/1	**Required.**Interchange level acknowledgement requested. Valid values: • 0 - No acknowledgment requested. • 1 - Interchange level acknowledgment requested.	0
	ISA15	1...1	1/1	**Required.**Indicates whether the interchange is for production, test, or information purposes. Valid values: • I - Information. • P - Production data. • T - Test data.	P
	ISA16	1...1	1/1	**Required.**Sub element separator.	–
GS		1...*	–	GS group functional envelope. Child of ISA. Only one GS group expected per interchange.	–
	GS01	1...1	2/2	**Required.**GS group function code. Valid value SH - Shipment.	SH
	GS02	1...1	2/15	**Required.**Application sender's code.	2222224043588
	GS03	1...1	2/15	**Required.**Application receiver's code.	TRACELINK
	GS04	1...1	8/8	**Required.**Current date stamp in 8 char X12 date format YYYYMMDD.	240520
	GS05	1...1	4/8	**Required.**Current time stamp in 6 char X12 time format HHMMSS.	142000
	GS06	1...1	1/9	**Required.**Group control ID number.	619827
	GS07	1...1	1/2	**Required.**Responsible agency code. Valid value is X.	X
	GS08	1...1	1/12	**Required.**X12 message version code. This could be any X12 version.	004010
ST		1...*	–	ST transaction set envelope. Child of GS group. Only one ST transaction expected.	–
	ST01	1...1	3/3	**Required.**Transaction set identifier code. Valid value for ASN is 856.	856
	ST02	1...1	4/9	**Required.**Transaction set ID number. Counter for each ST segment beginning with 0001.	0001
	BSN	1...1	–	**Required.**Beginning Segment for Ship Notice. Child of ST transaction set.	–

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Input Element			Occurs	Length	Description	Example
		BSN01	1...1	2/2	**Required.**Transaction purpose code. **Valid values:** • 00 – Original document, create in target. • 01 – Cancel order. • 02 – Create document or item from message. • 03 – Delete document or item. • 04 – Changes to document header. • 05 – Replace entire document. • 06 – Document is a confirmation. • 07 – Duplicate transaction. • 08 – Document or item status. • 11 – Response message. • 13 – Request message. • 16 – Proposed document or item. • 17 – Message canceled and reissued. • 22 – Information only. • 24 – Document is in draft state. • 45 – Followup message. • CO – Document or item has been corrected.	00
		BSN02	1...1	2/30	**Required.**Shipment identification number.	0080016047
		BSN03	1...1	8/8	**Required.**ASN Transaction date in CCYYMMDD format.	20240520
		BSN04	0...1	6/6	ASN time in HHMMSS format.	142122
		BSN05	0...1	4/4	Hierarchical structure code indicating HL structure of a transaction set.	–
		BSN06	0...1	2/2	Transaction type code. Optional. Valid values: • AS - Advanced ship notice • DO - Drop ship notice	–
		HL	1...*	–	Hierarchical Level - Shipment level. Child of ST transaction set.	–
		HL01	1...1	1/12	**Required.**Hierarchical ID number **1** for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction	1
		HL02	0...1	0/12	HL01 ID number of the parent segment for the current segment.	–
		HL03	1...1	1/2	**Required.**Code identifying hierarchical level of current HL group. Valid values: • S - HL shipment level • O - HL order level • T - HL Tare/Pallet level • P - HL Case or pack level • Q - HL Inner pack level • I - HL item level	S
		HL04	0...1	0/1	Code indicating if there are child data segments subordinate to the current HL level.	–

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Input Element	Occurs	Length	Description	Example
TD1	1...20	–	Carrier Details - Quantity and Weight. Child of HL shipment.	–
TD101	0...1	3/5	Packaging code at shipment header level. Valid values: • PLT - Pallet • CAS - Case • BDL- Bundle	CAS
TD102	0...1	1/7	Lading quantity. Number of units in the delivery for the packaging containers.	5
TD106	1...1	1/2	**Required.**Weight qualifier. Valid values: • G - Gross weight • L - Allowed • N - Net Weight • T - Tare	–
TD107	1...1	1/10	**Required.**Gross Weight	995.894

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Input Element				Occurs	Length	Description	Example
			TD108	1...1	2/2	**Required.**Weight unit of measure. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	LB

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Input Element				Occurs	Length	Description	Example
		TD5		0...12	–	Carrier Details – Routing. Child of HL shipment.	–
			TD501	0...1	1/2	Routing sequence code describing relationship of a carrier to a specific shipment movement. Valid value is 0 - Origin carrier, regardless of mode.	O
			TD502	1...1	1/2	**Required.**ID code qualifier. Valid value is 2 - SCAC code for carrier.	2
			TD503	1...1	2/80	**Required.**ID code. 2 to 4 digit carrier code SCAC.	ABFS
			TD504	0...1	1/2	Transportation method type code identifying the method or type of transport used for the shipment. **Valid values:** • A – Air • AE – Air Express • H – Customer pickup • I- Common irregular carrier • J – Truck • K - Backhaul • L - Contract carrier • LT – Less than trailer load (LTL) • M – Motor (common carrier) • N - Private Vessel • O – Container sea • P - Private Parcel service • R – Rail • S – Sea/Ocean • SR – Supplier truck • T - Best way • U - Inland waterway • U – Private parcel service (HDMA) • X – Intermodal (piggy-back) • ZZ - Mutually defined • 7 – Mail	M
			TD505	0...1	1/35	Routing. Free-form description of routing or requested routing for shipment or for originating carrier's identity.	
			TD506	0...1	2/2	Shipment status code. Status of order or shipment or disposition of any difference between quantity ordered and quantity shipped for a transaction. Valid values: • CC - Shipment complete • PR - Partial shipment	CC
		TD3		0...12	–	Carrier Details – Equipment. Child of HL shipment.	–
			TD301	0...1	2/2	Equipment description code identifying type of equipment used for shipment. Valid values: • CN - Container • RR - Rail car • TL - Trailer • VE - Vessel, ocean	CN
			TD302	0...1	1/4	Equipment initial. Prefix or alphabetical part of equipment unit's identifying number.	321

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Input Element	Occurs	Length	Description	Example
TD303	0...1	1/15	Equipment identification number. Pure numeric form for equipment number preferred.	7000829072
REF	0...*	–	Reference Identification for additional shipping documents. Up five instances of the REF segment supported for additional shipping documents or identifiers. Child of HL shipment.	–
REF01	1...1	2/3	Reference ID qualifier. Valid values: • 2I – Tracking number • BM – Bill of lading • CN - Carrier's reference number • MB - Master bill of lading • SN - Seal number • VR - Vendor Identifier in customer's internal system.	VR
REF02	1...1	1/30	Reference ID number.	95857627
PER	0...1	–	Administrative communications contact - manufacturer.	–
PER01	1...1	2/2	Contact function code identifying major duty or responsibility of person or group named as contact. Valid values: • PL - Manufacturer • CE - Certifier	PL
PER02	1...1	1/40	Name of the contact person responsible for authenticating the pedigree information.	John Smith
PER03	1...1	2/2	Communication Number Qualifier identifying the contact person's telephone number or email address. Valid values: • TE - Telephone number • EM - Email address	TE
PER04	1...1	11/20	Communication number: Telephone number of the contact person expected in this field.	+1.516.747.6849
PER05	1...1	2/2	Communication Number Qualifier identifying the contact person's telephone number or email address. Valid values: • TE - Telephone number • EM - Email address	EM
PER06	1...1	6/50	Communication number: Email address for the contact person expected in this field.	jsmith@manufac.com
DTM	0...10	–	DTM segment for shipping and delivery dates. Up to three instances of DTM segment can be sent. Child of HL shipment.	–

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Input Element				Occurs	Length	Description	Example
			DTM01	1...1	0/3	Date/Time qualifier. Valid values: • 011 – Shipped (Required) • 017 – Estimated Delivery (Required) • 067 – Current scheduled delivery date (Optional)	017
			DTM02	0...1	8/8	Date n CCYYMMDD format.	20240511
			DTM03	0...1	4/8	Time in HHMMSS format. Required for 017 estimated delivery date.	125422
			DTM04	0...1	2/2	Time zone for ship time. Will take whatever is sent.	PS
		N1		1...1	–	N1: Name. Ship to party instance of N1 looping group. Child of HL shipment. The following partner types are supported: • ST – Ship to business address information • BY – Buyer business address information • BT – Bill To business address information • SF – Sender shipping address information • SU – Supplier business address information • CA – Carrier business address information Ship from and Ship to are recommended.	–
			N101	1...1	2/3	Entity identifier code for shipping address of receiving business party. Valid values: • ST – Ship to party • BY – Buying party • BT – Bill to party • SF – Ship from party • SU – Supplier • CA – Carrier	ST
			N102	1...1	1/60	Name.	Wholesale Inc
			N103	1...1	1/2	Identifier code qualifier. Valid values: • 01 – DUNS • 09 – DUNS+4 • 11 – Drug Enforcement Agency registration number • 21 – Health Industry Number • 54 - Warehouse • 91 – Company identifier • 92 – Company location identifier • UL – Global Location Number	11
			N104	1...1	2/80	Identifier code.	3333331013655
		N3		1...1	–	N3: Address. Child of Ship to N1 Name segment.	–
			N301	1...1	1/55	Street address 1.	555 Neelan Road
			N302	0...1	0/55	Street address 2.	Suite 123
		N4		1...1	–	N4: Geographic Location. Child of Ship to N1 Name segment.	–
			N401	1...1	2/30	City name.	Sacramento
			N402	1...1	2/2	State or province code. Code (Standard state/province) as defined by appropriate government agency.	CA

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Input Element	Occurs	Length	Description	Example
N403	1...1	1/15	Postal code. Code defining international postal zone code excluding punctuation and blanks (zip code for United States).	95833
N404	0...1	2/3	Country code.	US
PER	0...6	–	Contact information for carrier party.	–
PER01	1...1	2/2	Contact function code identifying major duty or responsibility of person or group named as contact. The valid value for manufacturer is AJ - Primary contact.	AJ
PER02	1...1	1/40	Name of the contact person responsible for authenticating the pedigree information.	John Smith
PER03	1...1	2/2	Communication Number Qualifier identifying the contact person's telephone number or email address. Valid values: • TE - Telephone number • EM - Email address	TE
PER04	1...1	11/20	Communication number: Telephone number of the contact person expected in this field.	+1.516.747.6849
PER05	1...1	2/2	Communication number qualifier identifying the contact person's telephone number or email address. Valid values: • TE - Telephone number • EM - Email address	EM
PER06	1...1	6/50	Communication number: Email address for the contact person expected in this field.	jsmith@manufac.com
HL	1...*	–	Hierarchical Level - Order. Child of HL shipment level. Supports all possible HL hierarchy levels.	–
HL01	1...1	1/12	Hierarchical ID number. Increment previous HL01 element by 1.	2
HL02	0...1	0/12	HL01 ID number of the parent segment for the current segment.	1
HL03	1...1	1/2	Code identifying hierarchical level of current HL group. HL level Order = O Valid values: • S - HL shipment level • O - HL order level • T - HL Tare/Pallet level • P - HL Case or pack level • Q - HL Inner pack level • I - HL item level	O
HL04	0...1	0/1	Code indicating if there are child data segments subordinate to the current HL level.	–
PRF	1...1	–	PRF-Purchase Order Reference. Child of HL order level.	–
PRF01	1...1	1/22	Purchase order number.	04563869
PRF02	0...1	1/22	Purchase order release number.	123876

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Input Element	Occurs	Length	Description	Example
PRF03	0...1	1/8	Change order sequence number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set.	123876
PRF04	1...1	8/8	Purchase order date in CCYYMMDD format.	20140511
REF	0...12	–	REF: Optional reference document identification for purchase order. Child of PRF purchase order reference segment. Up to 3 instances of REF segment supported.	–
REF01	0...1	2/3	Reference document identification qualifier identifying seller's invoice. Valid values: • IV - Seller's invoice number • VN - Vendor's order number • IA - Vendor identifier in customer's internal system.	IV
REF02	0...1	1/30	Reference document ID number.	906563869
DTM	0...10	–	Invoice date for seller's invoice in REF.	–
DTM01	0...1	0/3	Date/Time qualifier. Valid value is Invoice - 003.	003
DTM02	0...1	8/8	Date n CCYYMMDD format.	20140511
DTM03	0...1	0/8	Time in HHMMSS format.	125422
HL	0...*	–	HL hierarchical loop mapping for all container levels in a packaging aggregation, whether a pallet, case or bundle.	–
HL01	1...1	1/12	Hierarchical ID number. Increment previous HL01 element by 1.	4
HL02	0...1	1/12	HL01 ID number of the parent segment for the current segment.	2
HL03	1...1	1/2	Packaging or item level code identifying hierarchical level of current HL group. Valid values: • PLT - Pallet • CAS - Case • BDL- Bundle	T
HL04	0...1	1/1	Code indicating if there are child data segments subordinate to the current HL level.	1
MAN	0...*	–	MAN Marks and numbers mapping to for the top level packaging container. All incoming qualifiers are mapped as a pass thru. Child of HL(2).	–
MAN01	1...1	1/2	Mark and number qualifier. Pass thru mapping.	GM
MAN02	1...1	1/48	Pallet or case identifier number.	00010305912002745650
MAN03	0...1	1/48	Optional alternate pallet or case identifier number.	00010305912002745650

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Input Element				Occurs	Length	Description	Example
		PAL		0...1	–	PAL pallet type and load characteristics, if HL(2) referencing a pallet. Only mapped for pallets when present in source.	–
			PAL01	0...1	1/2	Pallet type code indicating type of pallet. Pass thru mapping. Valid values: • 1 - Alumninum • 4 - Standard • 6 - Wood	6
			PAL02	0...1	1/3	Pallet tiers. The number of layers per pallet.	4
			PAL03	0...1	1/3	Pallet blocks. The number of pieces-cases, etc - per pallet layer.	12
			PAL04	0...1	1/6	Pack. The number of inner containers, or eaches if no inner containers, per outer container.	24
			PAL05	0...1	1/8	Weight per unit. Not currently mapped.	–
			PAL06	0...1	2/2	Weight unit of measure. Not currently mapped.	–
			PAL07	0...1	1/8	Length. Largest horizontal dimension of an object measured when the object is in the upright position.	–
			PAL08	0...1	1/8	Width. Shorter measurement of the two horizontal dimensions measured with the object in the upright position.	–
			PAL09	0...1	1/8	Height. Vertical dimension of an object measured when the object is in the upright position.	–

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Input Element				Occurs	Length	Description	Example
			PAL10	0...1	2/2	Unit of measure for dimensions. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	CA

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Input Element	Occurs	Length	Description	Example
PAL15	0...1	1/1	Pallet exchange code. Pass thru. Valid values: • 1 – No exchange of pallets • 2 – Exchange pallets • 3 – Return pallets	1
HL	0...*	–	HL hierarchical level for product aggregated against a purchase order OR any parent container.	–
HL01	1...1	1/12	Hierarchical ID number. Increment previous HL01 element by 1.	5
HL02	0...1	1/12	HL01 ID number of the parent segment for the current segment.	4
HL03	1...1	1/2	Item level code identifying hierarchical level of current HL group with loose eaches for PO. The valid value is I - Item.	I
HL04	0...1	1/1	Code indicating if there are child data segments subordinate to the current HL level.	1
LIN	1...1	–	LIN loop mapping for aggregated product linked to any parent container mapped to packagedProduct in packaging aggregation. Note: Lot number in REF segment.	–
LIN01	0...1	1/20	Line item number.	000010

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Input Element				Occurs	Length	Description	Example
			LIN02	1...1	2/2	Product or service ID qualifier. **Valid values:** • BP – Buyer's product number. • CB – Buyer's catalog number. • EN – EAN 2-5-5-1. • FV – Canada product number. • IN – Buyer's Item Number. • MF – Manufacturer's product identifier. • N1 – US National Drug Code in 442 format. • N2 – US National Drug Code in 532 format. • N3 – US National Drug Code in 541 format. • N4 – US National Drug Code in 542 format. • NH – National health code. • PI – Purchaser's(Customer's) product GTIN-14 identifier. • SK – Stock Keeping Unit. • UA – Case UPC. UPC Case Code (2-5-5). Legacy UPC. • UJ – Package UPC. Consumer Package Code (1-5-5). Legacy UPC. • UI – UPC Consumer Package Code (1-5-5). • UK – GTIN-14 identification number. • UP – UCC-12. 12 digit EAN.UCC (1-5-5-1). Also UPC-A and GTIN-12. • UX – Universal product number (UPC). • VC – Vendor Catalog Number. Vendor's (Seller's) Catalog Number. • VN – Vendor (Sellers) identification number.	BP
			LIN03	1...1	1/80	Product or service identifier value as qualifier by LIN02.	100021
			LIN04	0...1	0/2	Product service ID qualifier for product code types. See LIN02 for list of valid values.	VN
			LIN05	0...1	0/48	Product code identifier qualifier as defined by product code identifier type in LIN04.	1000818
			LIN06	0...1	0/2	Product service ID qualifier for product code types. See LIN02 for list of valid values.	UK
			LIN07	0...1	0/48	Product code identifier qualifier as defined by product code identifier type in LIN06.	00002541789536
			LIN08	0...1	0/2	Product service ID qualifier for product code types. See LIN02 for list of valid values.	SK
			LIN09	0...1	0/48	Product code identifier qualifier as defined by product code identifier type in LIN08.	000025417895
			LIN10	0...1	0/2	Product service ID qualifier for product code types. See LIN02 for list of valid values.	UX

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Input Element	Occurs	Length	Description	Example
LIN11	0...1	0/48	Product code identifier qualifier as defined by product code identifier type in LIN10.	100021
LIN12	0...1	0/2	Product service ID qualifier for product code types. See LIN02 for list of valid values.	N4
LIN13	0...1	0/48	Product code identifier qualifier as defined by product code identifier type in LIN12.	03820204013
SN1	1...1	–	SN1 delivery product details including quantity and UOM for loose eaches associated with PO and for aggregated product linked to any parent container. Child of HL Level Item.	–
SN101	0...1	1/20	Assigned identification, line item number. This can be a delivery or purchase order line item number, any other assigned identifier type, or it could be not populated.	000010
SN102	0...1	1/10	Quantity of ordered product units in delivery.	24.000

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Input Element				Occurs	Length	Description	Example
			SN103	0...1	2/2	Unit of measure for quantity of units shipped. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	EA

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Input Element				Occurs	Length	Description	Example
			SN104	0...1	1/15	Quantity of ordered product units shipped to date.	24.000
			SN105	0...1	1/15	Total quantity of product units ordered.	24.000

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Input Element				Occurs	Length	Description	Example
			SN106	0...1	2/2	Unit of measure for quantities ordered and shipped to date. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	EA

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Input Element	Occurs	Length	Description	Example
SN108	0...1	2/2	Line item status code specifying action taken by the seller on a line item requested by the buyer.	–
PO4	0...1	–	PO4 delivery product physical details for loose eaches and for aggregated product linked to any parent container associated with PO. Child of HL Level Item.	–
PO401	0...1	1/6	Total number of inner containers, or number of eaches if there are no inner containers, per outer container ... Count of number of units.	25
PO402	0...1	1/8	Size of supplier units in pack.	12

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Input Element				Occurs	Length	Description	Example
			PO403	0...1	2/2	Unit of measure for PO402. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	EA

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Input Element				Occurs	Length	Description	Example
			PO404	0...1	3/5	Code identifying the type of packaging.	–
			PO405	0...1	1/2	Weight qualifier specifying the type of weight.	G
			PO406	0...1	1/9	Gross weight per pack.	1246

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Input Element				Occurs	Length	Description	Example
			PO407	0...1	2/2	Unit of measure for weight. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	LB

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Input Element				Occurs	Length	Description	Example
			PO408	0...1	1/9	Gross volume per pack.	4587

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Input Element				Occurs	Length	Description	Example
			PO409	0...1	2/2	Unit of measure for volume. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	CI

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Input Element				Occurs	Length	Description	Example
			PO410	0...1	1/8	Length. Largest horizontal dimension of an object measured when the object is in the upright position.	–
			PO411	0...1	1/8	Width. Shorter measurement of the two horizontal dimensions measured with the object in the upright position.	–
			PO412	0...1	1/8	Height. Vertical dimension of an object measured when the object is in the upright position.	–

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Input Element				Occurs	Length	Description	Example
			PO413	0...1	2/2	Unit of measure for dimension. **Valid values** • 02 – Statute Mile • 4G – Microliter • AM – Ampoule • AV – Capsule • BD – Bundle • BG – Bag • BO – Bottle • BX – Box • C3 – Centiliter • CA – Case • CC – Cubic Centimeter • CF – Cubic Feet • CG – Card, Blister • CI – Cubic Inches • CL – Cylinder • CM – Centimeter • CN – Can • CP – Crate • CQ – Cartridge • CR – Cubic Meters • CT – Carton • DA – Day • DI – Dispenser • DK – Kilometers • DL – Deciliter • DM – Decimeter • DR – Drum • DS – Display • DZ – Dozen • EA – Each • FO – Fluid Ounce • FT – Foot • GA – Gallon • GL – Gram/liter • GR – Gram • GS – Gross • H4 – Hectoliter • HF – Hundred Feet • HR – Hours • IN – Inch • K6 – Kiloliters • KG – Kilogram • KT – Kit • LB – Pounds • LF – Linear Foot • LO – Lot (unit of procurement) • LT – Liter • LY – Linear Yard • MC – Microgram • ME – Milligram • ML – Milliliter • MM – Millimeter • MO – Months • MR – Meter • OZ – Ounces • PC – Piece • PF – Pallet • PK – Package • PR – Pair • PT – Pint • QT – Quart • RL – Roll • SC – Square Centimeter • SF – Square Foot • SH – Sheet • SI – Square Inch • SM – Square Meter • ST – Set • SY – Square Yard • T3 – Thousand Pieces • TB – Tube • TH – Thousand • TY – Tray • U2 – Tablet • UM – Million • UN – Unit • V2 – Pouch • VI – Vial • WK – Week • YD – Yard • YR – Years	CA

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Input Element				Occurs	Length	Description	Example
			PO414	0...1	1/6	Number of eaches per inner container.	24
		PID		0...200	–	PID delivery product description for loose eaches associated with PO and for aggregated product linked to any parent container. Child of HL Level Item.	–
			PID01	0...1	1/1	Item description type code.	F
			PID05	0...1	1/80	Description of product.	–
		REF		0...*	–	REF delivery product reference for lot number for aggregated product linked to any parent container. Child of HL Level Item.	–
			REF01	1...1	2/3	Reference ID qualifier. Valid value is LT – Lot number Lot number is required in REF02.	LT
			REF02	1...1	1/30	Reference ID number	B000829072
		REF		0...*		REF delivery product reference for seller's invoice number if present for loose eaches associated with PO and for aggregated product linked to any parent container. Child of HL Level Item.	
			REF01	1...1	2/3	Reference ID qualifier. Valid value is IV - Seller's invoice number.	IV
			REF02	1...1	1/30	Reference ID number	B000829072
		DTM		0...10	–	DTM delivery product dates for expiration date for loose eaches associated with PO and for aggregated product linked to any parent container. Child of HL Level Item.	–
			DTM01	0...1	0/3	Date/Time qualifier. Valid values: • 036 – Expiration date • 208 – Lot number expiration date	036
			DTM02	0...1	0/8	Date in YYYYMMDD format.	20150820
			DTM03	0...1	4/8	Ship time in 24 hour time HHMM OR HHMMSS OR HHMMSSD OR HHMMSSDD X12 format.	142432
			DTM04	0...1	2/2	Time zone for ship time.	PS
	CTT			1...1	–	Transaction totals.	–
		CTT01		1...1	1/6	Total number of LIN segments in the transaction set.	–
SE				1...1	–	ST ... SE transaction set trailer envelope. Child of GS group. Only one ST transaction expected.	–
	SE01			1...1	1/10	Total count of segments in ST ... SE transaction set including ST and SE segments.	–
	SE02			1...1	4/9	Transaction set control number.	–
GE				1...1		GS ... GE functional group trailer envelope. Child of ISA interchange. Only one GS group expected.	–
	GE01			1...1	1/6	Number of transaction sets in functional group.	–
	GE02			1...1	1/9	Functional group control number.	–

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Input Element		Occurs	Length	Description	Example
IEA		1...1		ISA ... IEA interchange control trailer envelope. Only one interchange expected per transmission.	-
	IEA01	1...1	1/5	Number of functional groups in interchange.	-
	IEA02	1...1	9/9	Interchange control number.	-

Example

```
ISA*00*          *00*          *ZZ*PAR             *11*RV0464646
*190125*0900*^*00401*828691477*0*P*>
GS*SH*PAR*RV0464646*20190125*090000*828691477*X*004010
ST*856*0001
BSN*CO*584256*20190124*23323458**AS
HL*1**S*1
TD1*PLT*3****N*4545.55*LB
TD5**2*TSG355*X*Acme*CC
TD3*RR*LTL*447542
REF*BM*197406416
REF*2I*06416-2I
REF*CN*16416-CN
REF*MB*16416-MB
REF*SN*2206416-SN
REF*VR*406446-VR
DTM*011*20240315*13201234*UT
DTM*067*20240321*10211520*ET
N1*BY*NameBY*9*56568989
N3*Address1*Address2
N4*City*MI*00000*US
PER*AJ*Name*TE*111111111
PER*AJ*Name2*EM*EEEEEEE
N1*BT*NameBT*9*22222222
N3*BT Address1
N4*BT City*AZ*55555*US
PER*AJ*BT Name*TE*111111111
N1*ST*VALUE DRUG COMPANY*11*RV0464646
N3*195 THEATER DRIVE
N4*DUNCANSVILLE*PA*16635*US
N1*BY*VALUE DRUG CO*91*RV0464646
N3*195 THEATER DRIVE
N4*DUNCANSVILLE*PA*16635*US
N1*SF*PAR PHARMACEUTICAL*UL*PP0244703
N3*30 DUNNIGAN DRIVE, SUITE C
N4*MONTEBELLO*NY*10901*USA
N1*SU*SUP PHARMACEUTICAL*92*4573753
N3*251 Ridge Pond Road
N4*Spring Hills*NY*55221*US
N1*SE*PAR PHARMACEUTICAL*1*RP0301046
```

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```
N3*1 Ram Ridge Road
N4*Spring Valley*NY*10977*US
N1*CA*Carrier*9*33333
N3*Carrier Address1
N4*CA City*CT*999999*US
PER*AJ*Name*TE*111111111
PER*AJ*Name2*EM*EEEEEEE
N1*CA*Carrier*91*222222
N3*Carrier Address2
N4*CA City2*NY*000000*US
HL*2*1*O*1
PRF*V000012332***20190122
HL*3*2*T*1
MAN*GM*00000498840009083000
HL*4*3*I
LIN*12*CB*9990354*PI*2344656567245*UX*00254200801-2-
A1*VC*A26693*MF*SK2344656*NH*4567887800
SN1*12*350*EA
REF*LT*A26693
PO4*1*2*EA*PO404
DTM*036*20240320**LT
DTM*208*20300210**PS
HL*5*3*I
LIN*13*N4*00254200811-2-
A2***LT*A26345*SK*SK2344000*CB*487822*PI*245356
SN1*13*3013*EA
REF*LT*A26346
HL*6*3*P*1
MAN*GM*00000498840009083011
HL*7*6*I
LIN*2*N4*49884057411-6-B1***LT*32368201
SN1*2*3010*EA
REF*LT*A26346
HL*8*6*I
LIN*3*N4*49884000702-6-B2***LT*32572201
SN1*3*303*EA
REF*LT*32572201
HL*9*6*I
LIN*8*N4*49884065909-6-B3***LT*KM0211
SN1*8*1300*EA
REF*LT*KM0211
HL*10*2*T
MAN*GM*00000498840009003211
HL*11*10*P
MAN*GM*00000498840009003311
HL*12*11*I
```

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```
LIN*49*N4*00603548621-6-B4***LT*C0490618A
SN1*49*1111*EA
REF*LT*C0490618A
CTT*6
SE*75*0001
GE*1*828691477
IEA*1*828691477
```

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