

856 Ship Notice/ManifestFunctional Group ID: **SH**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for the use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information.

The purpose of the 856 transaction transmitted to Sherwin-Williams is to list the contents of a shipment and related information on the

SW expects the 856 transaction to follow the CIDX standard that a ship notice references one order per shipment.

Heading:

Seg ID	Name	Max Use	Loop Rep	Comments
ST	Transaction Set Header	1		required
BSN	Beginning Segment for Ship Notice	1		required
DTM	Date/Time Reference			required

Detail: - Shipment

Seg ID	Name	Max Use	Loop Rep	Comments
HL	Hierarchical Level	1	HL	200000 required
PRF	Purchase Order Reference	1		required
MEA	Measurements	40		
TD1	Carrier Details (Quantity and Weight)	20		
TD5	Carrier Details (Routing Sequence/Trans	12		
TD3	Carrier Details (Equipment)	12		
REF	Reference Numbers	>1		required
			HL/N1	200
N1	Name	1		required
PER	Administrative Communications Contact	3		
FOB	F.O.B. Related Instructions	1		

Detail: - Tare

Seg ID	Name	Max Use	Loop Rep	Comments
HL	Hierarchical Level	1	HL	200000
MEA	Measurements	40		
REF	Reference Numbers	>1		
MAN		>1		

Detail: - Item

Seg ID	Name	Max Use	Loop Rep	Comments
HL	Hierarchical Level	1	HL	200000 required
LIN	Item Identification	1		required
SN1	Item Detail (Shipment)	1		required
PID	Product/Item Description	200		required
PKG	Marking, Packaging, Loading	25		required

Summary:

Seg ID	Name	Max Use	Loop Rep	Comments
CTT	Transaction Totals	1		required
SE	Transaction Set Trailer	1		required

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number.

Semantics: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 856 selects the ASN Transaction Set.)

Data Element Summary

Ref Des	Ref No	Name	Attributes		
ST01	143	Transaction Set Identifier Code 856 - X12 Ship Notice/Manifest	M	ID	3/3
ST02	329	Transaction Set Control Number	M	AN	4/9

Segment: BSN Beginning Segment for Ship Notice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To transmit identifying numbers, dates and other basic data relating to the transaction set.

Syntax: 1 C0706 - If BSN07 is present, then BSN06 is required.

Semantics:
 1 BSN03 is the date the shipment transaction set is created.
 2 BSN04 is the time the shipment transaction set is created.
 3 BSN06 is limited to shipment related codes.

Comments: 1 BSN06 and BSN07 differentiate the functionality of use for the transaction set.

Data Element Summary

Ref Des	Ref No	Name	Attributes		
BSN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original 01 Cancellation 05 Replace	M	ID	2/2
BSN02	396	Shipment Identification	M	AN	2/30
BSN03	373	Date Transaction Date - CCYYMMDD	M	DT	8/8
BSN04	337	Time Time expressed in 24-hour clock - HHMMSS	O	TM	4/8
BSN05	1005	Hierarchical Structure Code 0001 Shipment, Order, Packaging, Item 0004 Shipment, Order, Item	O	ID	4/4
BSN06	640	Transaction Type Code	C	ID	2/2
BSN07	641	Status Reason Code	O	ID	3/3

Segment: BSN Beginning Segment for Ship Notice

Segment: DTM **Date/Time/Period**
Position: 040
Loop:
Level: Heading
Usage: Mandatory
Max Use: >1
Purpose: To specify pertinent dates and times

Syntax:

- 1 At least one of DTM02, DTM03, or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantics:
Comments:

Data Element Summary

Ref Des	Ref No	Name	Attributes		
DTM01	374	Date/Time Qualifier	M	ID	3/3
	011	Shipped			
	017	Estimated Delivery			
DTM02	373	Date	R	DT	8/8
		CCYYMMDD			
DTM03	337	Time	R	TM	4/8
DTM04	623	Time Code	O	ID	2/2
DTM05	1250	Date/Time Period Qualifier	R	ID	2/3
DTM06	1251	Date Time Period	R	AN	1/35

Segment: HL Hierarchical Level - SHIPMENT

Position: 010

Loop: HL-S

Level: Detail

Usage: Mandatory

Max Use: 200000

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments.

Set Notes: 1 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Syntax:

Semantics:

- Comments:**
- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data, and packaging data to line item data.
 - 2 The HL segment defines a top-down/left-right ordered structure.
 - 3 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.
 - 4 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 5 HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segment in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
 - 6 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Data Element Summary

Ref Des	Ref No.	Name	Attributes
HL01	628	Hierarchical ID Number Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure.	M AN 1/12

HL02	734 Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to.	O	AN	1/12
HL03	735 Hierarchical Level Code S Shipment	M	ID	1/2
HL04	736 Hierarchical Child Code 0 No subordinate HL segment in this hierarchical structure. 1 Additional subordinate HL data segment in this hierarchical structure.	O	ID	1/1

Segment: **PRF** **Purchase Order Reference**
Position: 050
Loop: HL
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide reference to a specific purchase order

Syntax: 1 PRF04 is the date assigned by the purchaser to purchase order.

Semantics:

Comments:

Data Element Summary

Ref Des	Ref No Name	Attributes
PRF01	324 Purchase Order Number	M AN 1/22
PRF02	328 Release Number	O AN 1/30
PRF03	327 Change Order Sequence Number	O AN 1/8
PRF04	373 Date CCYYMMDD	O DT 8/8
PRF05	350 Assigned Identification	O AN 1/20
PRF06	367 Contract Number	O AN 1/30
PRF07	92 Purchase Order Type Code	O ID 2/2
	BK Blanket Order	
	RL Release (on a Blanket Order)	
	SA Stand Alone Order	
	CN Consigned Order (SOI Ship Order)	
	KA Agreement (AAP Invoice created from this Pay-O)	
	KI Indefinite Delivery Indefinite Quantity (SOMI Ship Order)	
	SO Shipped Order (SOMI or SOI Pay Order)	
	IN Information Copy (Pre-load at start-up - <i>not transmitted</i>)	

Segment: MEA Measurements

Position: 080

Loop: HL

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

- Syntax:**
- 1 At least one of MEA03, MEA05, MEA06 or MEA08 is required.
 - 2 If MEA03 is present, then MEA04 is required.
 - 3 If MEA05 is present, then MEA04 is required.
 - 4 If MEA06 is present, then MEA04 is required.
 - 5 If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 are required.
 - 6 Only one of MEA08 or MEA03 may be present.

Semantics: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: When citing dimensional tolerances, and measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Data Element Summary

Ref Des	Ref No	Name	Attributes
MEA01	737	CH Chemistry PD Physical Dimensions (Product Ordered)	O ID 2/2
MEA02	738	Measurement Qualifier G Gross Weight N Actual Net Weight LN Length TH Thickness WD Width PSA Percent Solution Actual	O ID 1/3
MEA03	739	Measurement Value	R R 1/20
MEA04	C001	Composite Unit of Measure	R Comp
MEA05	740	Range Minimum	R R 1/20

MEA06	741 Range Maximum	R	R	1/20
MEA07	935 Measurement Significance Code	O	ID	2/2
MEA08	936 Measurement Attribute Code	R	ID	2/2
MEA09	752 Surface/Layer/Position Code	O	ID	2/2
MEA10	1373 Measurement Method or Device	O	ID	2/4

Segment: TD1 Carrier Details (Quantity and Weight)

Position: 110

Loop: HL-S

Level: Detail

Usage: Optional

Max Use: 20

Purpose: To specify the transportation details relative to commodity, weight, and quantity.

- Syntax:**
- 1 If TD101 is present, then TD102 is required.
 - 2 If TD103 is present, then TD104 is required.
 - 3 If TD106 is present, then TD107 is required.
 - 4 If either TD107 or TD108 are present, then the others are required.
 - 5 If either TD109 or TD110 are present, then the others are required.

Semantics:

Comments:

Data Element Summary

Ref Des	Ref No Name	Attributes
TD101	103 Packaging code	O AN 3/5
TD102	80 Lading Quantity	C NO 1/7
TD103	23 Commodity Code Qualifier	O ID 1/1
TD104	22 Commodity Code	C AN 1/30
TD105	79 Lading Description	O AN 1/50
TD106	187 Weight Qualifier	O ID 1/2
TD107	81 Weight	C R 1/10
TD108	355 Unit or Basis for Measurement Code	C ID 2/2
TD109	183 Volume	C R 1/8
TD110	355 Unit or Basis for Measurement Code	C ID 2/2

Segment: TD5 **Carrier Details (Routing Sequence/Transit Time)**
Position: 120
Loop: HL-S
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information.

Syntax:

- 1 At least one of TD502, TD504, TD505, TD506 or TD512 is required.
- 2 If TD502 is present, then TD503 is required.
- 3 If TD507 is present, then TD508 is required.
- 4 If TD510 is present, then TD511 is required.
- 5 If TD513 is present, then TD512 is required.
- 6 If TD514 is present, then TD513 is required.
- 7 If TD515 is present, then TD512 is required.

Semantics:

Comments: When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Data Element Summary

Ref Des	Ref No.	Attributes
TD501	133 Routing Sequence Code	O ID 1/2
TD502	66 Identification Code Qualifier	C ID 1/2
TD503	67 Identification Code	C AN 2/80
TD504	91 Transportation Method/Type Code	C ID 1/2
TD505	387 Routing	C AN 1/35
TD506	368 Shipment/Order Status Code	C ID 2/2
TD507	309 Location Qualifier	O ID 1/2
TD508	310 Location Identifier	C AN 1/30
TD509	731 Transit Direction Code	O ID 2/2

TD510	732 Transit Time Direction Qualifier	O	ID	2/2
TD511	733 Transit Time	C	R	1/4
TD512	284 Service Level Code	C	ID	2/2
TD513	284 Service Level Code	C	ID	2/2
TD514	284 Service Level Code	O	ID	2/2
TD515	26 Country Code	O	ID	2/3

Segment: TD3 Carrier Details (Routing Sequence/Transit Time

Position: 130

Loop: HL-S

Level: Detail

Usage: Optional

Max Use: 12

Purpose: To specify transportation details relating to the equipment used by the carrier.

- Syntax:**
- 1 Only one of TD301 or TD310 may be present.
 - 2 If TD302 is present, then TD303 is required.
 - 3 If TD304 is present, then TD305 is required.
 - 4 If either DT305 or TD306 are present, then the others are required.

Semantics:

Comments:

Data Element Summary

Ref Des	Ref No	Name	Attributes		
TD301	40	Equipment Description Code	M	ID	2/2
TD302	206	Equipment Initial	O	AN	1/4
TD303	207	Equipment Number	C	AN	1/10
TD304	187	Weight Qualifier	O	ID	1/2
	E	Estimated Net Weight			
	N	Actual Net Weight			
	T	Tare Weight			
TD305	81	Weight	C	R	1/10
TD306	355	Unit of Basis for Measurement Code	C	ID	2/2
TD307	102	Ownership Code	O	ID	1/1
TD308	407	Seal Status Code	O	ID	2/2
TD309	225	Seal Number	O	AN	2/15
TD310	24	Equipment Type	C	AN	1/4

Segment: REF Reference Numbers

Position: 150

Loop: RCD

Level: Detail

Usage: Optional

Max Use: 12

Purpose: To specify identifying information.

Syntax: 1 At least one of REF02 or REF03 is required.

Semantics: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Data Element Summary

Ref Des	Ref No	Name	Attributes
REF01	128	Reference Identification Qualifier BM Bill of Lading Number	M ID 2/3
REF02	127	Reference Identification Bill of Lading/Packing Slip Number	C AN 1/30
REF03	352	Description	C AN 1/80
REF04	C040		O Comp

Segment: N1 **Name**
Position: 220
Loop: N1
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name and code.

Syntax: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.

Semantics:

Comments: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the ID Code (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

Ref Des	Ref No	Name	Attributes		
N101	98	Entity Identifier Code ST Ship To	M	ID	2/3
N102	93	Name	C	AN	1/60
N103	66	6 Plant Code	C	ID	1/2
N104	67	Identification Code	C	AN	2/80

Segment: N1 **Name**
Position: 220
Loop: N1
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name and code.

Syntax: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.

Semantics:

Comments: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the ID Code (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

Ref Des	Ref No	Name	Attributes		
N101	98	Entity Identifier Code RI Remit To	M	ID	2/3
N102	93	Name	C	AN	1/60
N103	66	92 Assigned by Buyer or Buyer's Agent	C	ID	1/2
N104	67	Identification Code Vendor Number a la SW	C	AN	2/80
N105	706	Entity Relationship Code	O	ID	2/2
N106	98	Entity Identifier Code	O	ID	2/3

Segment: PER Administrative Communication Contact

Position: 270

Loop: N1

Level: Detail

Usage: Optional

Max Use: 3

Purpose: To identify a person or office to whom administrative communications should be directed.

Syntax:

- 1 If either PER03 or PER04 are present, then the others are required.
- 2 If either PER05 or PER06 are present, then the others are required.
- 3 If either PER07 or PER08 are present, then the others are required.

Semantics:

Comments:

Data Element Summary

Ref Des	Ref No	Name	Attributes		
PER01	366	Contact Function Code	M	ID	2/2
		CR Customer Relations			
PER02	93	Name	O	AN	1/60
PER03	365	Communication Number Qualifier	C	ID	2/2
PER04	364		C	AN	1/80
PER05	365	Communication Number Qualifier	C	ID	2/2
PER06	364	Communication Number	C	AN	1/80
PER07	365	Communication Number Qualifier	C	ID	2/2
PER08	364	Communication Number	C	AN	1/80
PER09	443	Contact Inquiry Reference	O	AN	1/20

Segment: FOB F.O.B. Related Instructions

Position: 280

Loop: N1

Level: Detail

Usage: Optional

Max Use: 3

Purpose: To specify transportation instructions relating to shipment.

- Syntax:**
- 1 If FOB03 is present, then FOB02 is required
 - 2 If FOB04 is present, then FOB05 is required.
 - 3 If FOB07 is present, then FOB06 is required
 - 4 If FOB08 is present, then FOB09 is required.

- Semantics:**
- 1 FOB01 indicates which party will pay the carrier.
 - 2 Fob02 is the code specifying transportation responsibility location.
 - 3 FOB06 is the code specifying the title passage location.
 - 4 FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and BOB06/FOB07.

Comments:

Data Element Summary

Ref Des	Ref No	Name	Attributes		
FOB01	146	Shipment Method of Payment	M	ID	2/2
		CC Collect			
		DE Per Contract			
		PP Prepaid (by Seller)			
FOB02	309	Location Qualifier	R	ID	1/2
FOB03	352	Description	O	AN	1/80
FOB04	334	Transportation Terms Qualifier Code	O	ID	2/2
FOB05	335	Transportation Terms Code	R	ID	3/3
FOB06	309	Location Qualifier	R	ID	1/2
FOB07	352	Description	O	AN	1/80
FOB08	54	Risk of Loss Qualifier	O	ID	2/2
FOB09	352	Description	R	AN	2/2

Segment: HL Hierarchical Level - TARE

Position: 010

Loop: HL-T

Level: Detail

Usage: Mandatory - *Future use*

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Set Notes: 1 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Syntax:

Semantics:

Comments:

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data, and packaging data to line item data.
- 2 The HL segment defines a top-down/left-right ordered structure.
- 3 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.
- 4 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 5 HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segment in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 6 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Data Element Summary

Ref Des	Ref No	Name	Attributes		
HL01	628	Hierarchical ID Number	M	AN	1/12
HL02	734	Hierarchical Parent ID Number	O	AN	1/12
HL03	735	Hierarchical Level Code T Shipping Tare	M	ID	1/2
HL04	736	Hierarchical Child Code	O	ID	1/1

- 0 No subordinate HL segment in this hierarchical structure.
- 1 Additional subordinate HL data segment in this hierarchical structure.

Segment: MEA Measurements

Position: 080

Loop: HL-T

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

- Syntax:**
- 1 At least one of MEA03, MEA05, MEA06 or MEA08 is required.
 - 2 If MEA03 is present, then MEA04 is required.
 - 3 If MEA05 is present, then MEA04 is required.
 - 4 If MEA06 is present, then MEA04 is required.
 - 5 If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 are required.
 - 6 Only one of MEA08 or MEA03 may be present.

Semantics: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: When citing dimensional tolerances, and measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Data Element Summary

Ref Des	Ref No	Name	Attributes
MEA01	737	Measurement Reference ID Code	O ID 2/2
	PD	Physical Dimensions (Product Ordered)	
MEA02	738	Measurement Qualifier	O ID 1/3
	G	Gross Weight	
	N	Actual Net Weight	
	LN	Length	
	TH	Thickness	
	WD	Width	
	PSA	Percent Solution Actual	
MEA03	739	Measurement Value	R R 1/20
MEA04	C001	Composite Unit of Measure	R Comp
MEA05	740	Range Minimum	R R 1/20
MEA06	741	Range Maximum	R R 1/20

MEA07	935 Measurement Significance Code	O	ID	2/2
MEA08	936 Measurement Attribute Code	R	ID	2/2
MEA09	752 Surface/Layer/Position Code	O	ID	2/2
MEA10	1373 Measurement Method or Device	O	ID	2/4

Segment: REF Reference Numbers

Position: 150

Loop: HL(T)

Level: Detail

Usage: Optional

Max Use: 12

Purpose: To specify identifying information.

Syntax: 1 At least one of REF02 or REF03 is required.

Semantics: 1 REF04 contains data relating to the value cited in REF02.

Comments:

Data Element Summary

Ref Des	Ref No Name	Attributes
REF01	128 Reference Identification Qualifier LS Bar Coded Serial Number	M ID 2/3
REF02	127 Reference Identification	C AN 1/30
REF03	352 Description	C AN 1/80
REF04	C040	O Comp

Segment: MAN Marks and Numbers

Position: 190

Loop: HL(T)

Level: Detail

Usage: Optional

Max Use: >1

Purpose: To indicate identifying marks and numbers for shipping containers.

Syntax: 1 If either MAN04 or MAN05 are present, then the others are required.
 2 If MAN06 is present, then MAN05 is required.

Semantics: 1 MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
 2 When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
 3 When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range and MAN06 is the ending number of that range.

Comments: 1 When MAN01 contains the code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
 2 MAN03 and/or MAN06 are only used when sending a range(s) of ID
 3 When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

Data Element Summary

Ref Des	Ref No	Name	Attributes
MAN01	88	Marks and Numbers Qualifier	M ID 1/2
	AI	UCC/EAN-128 Application Identifier (AI) and Data	
	GM	SSCC-18 and Application Identifier	
	MC	Master Caron Number	
	SM	Shipper Assigned	
	UC	U.P.C. Shipping Container Code	
MAN02	87	Marks and Numbers	M AN 1/48
MAN03	87	Marks and Numbers	O AN 1/48

MAN01	88 Marks and Numbers Qualifier <i>see list above</i>	R	ID	1/2
MAN02	87 Marks and Numbers	R	AN	1/48
MAN03	87 Marks and Numbers	O	AN	1/48

Segment: HL Hierarchical Level - Item

Position: 010

Loop: HL-I

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Set Notes: 1 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Syntax:

Semantics:

- Comments:**
- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data, and packaging data to line item data.
 - 2 The HL segment defines a top-down/left-right ordered structure.
 - 3 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment, and would be incremented by one in each subsequent HL segment within the transaction.
 - 4 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 5 current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segment in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
 - 6 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Data Element Summary

Ref Des	Ref No	Name	Attributes		
HL01	628	Hierarchical ID Number	M	AN	1/12
HL02	734	Hierarchical Parent ID Number	O	AN	1/12
HL03	735	Hierarchical Level Code I Item	M	ID	1/2
HL04	736	Hierarchical Child Code	O	ID	1/1

- 0 No subordinate HL segment in this hierarchical structure.
- 1 Additional subordinate HL data segment in this hierarchical structure.

Segment: LIN **Item Identification**
Position: 020
Loop: HL-I
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify basic item identification data.

Syntax:

- 1 If either LIN04 or LIN05 are present, then the others are required.
- 2 If either LIN06 or LIN07 are present, then the others are required.
- 3 If either LIN018 or LIN09 are present, then the others are required.
- 4 If either LIN10 or LIN11 are present, then the others are required.
- 5 If either LIN12 or LIN13 are present, then the others are required.
- 6 If either LIN14 or LIN15 are present, then the others are required.
- 7 If either LIN16 or LIN17 are present, then the others are required.
- 8 If either LIN18 or LIN19 are present, then the others are required.
- 9 If either LIN20 or LIN21 are present, then the others are required.
- 10 If either LIN22 or LIN23 are present, then the others are required.
- 11 If either LIN24 or LIN25 are present, then the others are required.
- 12 If either LIN26 or LIN27 are present, then the others are required.
- 13 If either LIN28 or LIN29 are present, then the others are required.
- 14 If either LIN30 or LIN31 are present, then the others are required.

Semantics: 1 LIN01 is the line item identification

Comments: 1 See the Data Dictionary for a complete list of ID's.
 Lin02 through LIN31 provide for fifteen different product/service ID's for
 or SKU.

Data Element Summary

Ref Des	Ref No	Name	Attributes
LIN01	350	Assigned Identification PO Line Item Number	O AN 1/20
LIN02	235	Product/Service ID Qualifier BP Buyer's Part Number	M ID 2/2
LIN03	234	Product/Service ID	M AN 1/48
LIN04 <i>Optional</i>	235	Product/Service ID Qualifier VP Vendor's (Seller's) Part Number	C ID 2/2
LIN05	234	Product/Service ID	C AN 1/48

LIN06	235 Product/Service ID Qualifier	C	ID	2/2
<i>Future use</i>	BN Bar-Coded Serial Number			
LIN07	234 Product/Service ID	C	AN	1/48
LIN08	235 Product/Service ID Qualifier	C	ID	2/2
<i>Future use</i>	LT Lot Number			
LIN09	234 Product/Service ID	C	AN	1/48
LIN10	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN11	234 Product/Service ID	C	AN	1/48
	<i>Not Used</i>			
LIN12	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN13	234 Product/Service ID	C	AN	1/48
	<i>Not Used</i>			
LIN14	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN15	234 Product/Service ID	C	AN	1/48
	<i>Not Used</i>			
LIN16	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN17	234 Product/Service ID	C	AN	1/48
	<i>Not Used</i>			
LIN18	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN19	234 Product/Service ID	C	AN	1/48
	<i>Not Used</i>			
LIN20	235 Product/Service ID Qualifier	C	ID	2/2
	<i>Not Used</i>			
LIN21	234 Product/Service ID	C	AN	1/48

Not Used

LIN22	235 Product/Service ID Qualifier <i>Not Used</i>	C	ID	2/2
LIN23	234 Product/Service ID <i>Not Used</i>	C	AN	1/48
LIN24	235 Product/Service ID Qualifier <i>Not Used</i>	C	ID	2/2
LIN25	234 Product/Service ID <i>Not Used</i>	C	AN	1/48
LIN26	235 Product/Service ID Qualifier <i>Not Used</i>	C	ID	2/2
LIN27	234 Product/Service ID <i>Not Used</i>	C	AN	1/48
LIN28	235 Product/Service ID Qualifier <i>Not Used</i>	C	ID	2/2
LIN29	234 Product/Service ID <i>Not Used</i>	C	AN	1/48
LIN30	235 Product/Service ID Qualifier <i>Not Used</i>	C	ID	2/2
LIN31	234 Product/Service ID <i>Not Used</i>	C	AN	1/48

Segment: SN1 Item Detail (Shipment)

Position: 030
Loop: HL-I
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify line-item detail relative to shipment

Syntax: 1 If either SN105 or SN106 are present, then the others are required.
Semantics: 1 SN101 is the ship notice line-item identification
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104

Data Element Summary

Ref Des	Ref No	Name	Attributes		
SN101	350	Assigned Identification Ship notice line number	O	AN	1/20
SN102	382	Number of Units Shipped	M	R	1/10
SN103	355	Unit or Basis for Measurement Code	M	ID	2/2
SN104	646	Quantity Shipped to Date	O	R	1/9
SN105	330	Quantity Ordered	C	R	1/9
SN106	355	Unit or Basis for Measurement Code	C	ID	2/2
SN107	728	Returnable Container Load Make-Up Code	O	ID	1/2
SN108	668	Line Item Status Code	O	ID	2/2

Segment: **PID** **Product/Item Description**
Position: 070
Loop: HL-I
Level: Detail
Usage: Optional
Max Use: 1000
Purpose: To describe a product or process in coded or free-form format.

Syntax: 1 If PID04 is present, then PID03 is required.
 At least one of PID04 or PID05 is required.
 If PID07 is present, then PID03 is required.
 If PID08 is present, then PID04 is required.
 If PID09 is present, then PID05 is required.

Semantic: 1 Use PID03 to indicate the organization that publishes the code list being referred to.
 2 PID04 should be used for industry specific product description codes.
 3 PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specific attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
 4 PID09 is used to identify the language being used in PID05.

Comments: 1 If PID01 equals "F", then PID05 is used. IF PID01 equals "S", then PID04 is used. IF PID01 equals "X", then both PID04 and PID05 are used.
 2 Use PID06 when necessary to refer to the product surface or layer
 3 PID07 specifies the individual code list of the agency specified in PID03.

Data Element Summary

Ref Des	Ref No	Name	Attributes
PID01	349	Item Description Type F Free-form	M ID 1/1
PID02	750	Product/Process Characteristic Code <i>Not Used</i>	O ID 2/3
PID03	559	Agency Qualifier Code <i>Not Used</i>	C ID 2/2
PID04	751	Product Description Code <i>Not Used</i>	C AN 1/12

PID05	352 Description	C	AN	1/80
PID06	752 Surface/Layer/Position Code <i>Not Used</i>	C	ID	2/2
PID07	822 Source Sub qualifier <i>Not Used</i>	O	AN	1/15
PID08	1073 Yes/No Condition or Response Code <i>Not Used</i>	O	ID	1/1
PID09	819 Language Code <i>Not Used</i>	O	ID	2/3

Segment: **PKG Marking, Packaging, Loading**
Position: 100
Loop: PKG
Level: Detail
Usage: Optional
Max Use: 25
Purpose: To describe marking, packaging, loading and unloading requirements.

Syntax: 1 At least one of PKG04, PKG05 or PKG06 is required.
 If PKG04 is present, then PKG03 is required.
 If PKG05 is present, then PKG01 is required.

Semantics: PKG04 should be used for industry-specific packaging description codes.

Comments: Use the MEA (Measurements) Segment to define dimensions, tolerances, weights, counts, physical restrictions, etc.
 If PKG01 equals "F", then PKG05 is used. IF PKG01 equals "S", then PKG04 is used. IF PKG01 equals "X", then both PKG04 and PKG05 are used.
 Use PKG03 to indicate the organization that publishes the code list being referred to.
 Special marking or tagging data can be given in PKG05 (description).

Data Element Summary

Ref Des	Ref No	Name	Attributes
PKG01	349	Item Description Type	C ID 1/1
PKG02	753	Packaging Characteristic Code	O ID 1/5
	35	Type of Package	
PKG03	559	Agency Qualifier Code	C ID 2/2
	AB	Assigned by Buyer	
PKG04	754	Packaging Description Code	C AN 1/7
	BB	Bulk Bags	
	BC	Box Car	
	BK	Dry Bulk Truck	
	BR	Brush	
	BV	500 LB Bulk Bag	
	B1	1000 LB Bulk Bag	
	B5	1500 LB Bulk Bag	
	B7	1700 LB Bulk Bag	
	B9	900 LB Bulk Bag	
	CA	Can	

CB	Static Free Bag (2000 LB)
CG	Hundred Gallons
CP	Combination Pounds
CT	Carton
C1	Static Free Bag (1000 LB)
DR	Drum
EA	Each
GA	Gallon
GM	Gram
HC	Hopper Car
HP	Half Pint
KG	Kilogram
KT	Kit
LA	Label
LB	Dry Pounds
MN	Minimum Freight Charge
OZ	Ounces
PA	5 Gallon Pail
PB	Piggyback
PT	Pint
QT	Quart
RL	Roller
RO	Roll of Labels
SH	Sheets of Paper
SS	Super Sack
SY	Square Yard
S1	1104 LB Super Sack
S2	2204 LB Super Sack
TB	Tote Bin
TC	Tank Car
TL	Truck Load
TN	Tons
TW	Tank Wagon
WP	Wet Pounds
WW	Wet Wet Pounds
01	10.5 -11 oz. Caulk
02	2 & 1/2 Gal. Pail
04	1 oz.
05	6 oz.
06	12 oz.
07	2 oz.
08	3 oz.
09	4 oz.
11	6 oz. Spray
12	Half Pint

13	Pint
14	Quart
15	1/2 Gallon
16	Gallon
17	Pail 2 Gallon
18	Spray Can 12-14 oz.
19	Kit, approx. 4 Gal.
20	Five Gallon
21	Spray Can 16 oz.
22	Kit 6-L/2 Gal.
23	Spray Can 20 oz.
24	Spray Can 10 - 11 oz.
25	1/4 Drum Gallons
26	1/2 Drum Gallons
27	Drum in Gallons
28	Gallons in a Tote
29	Gallons in a Tankwagon
30	Kit 3 Gallons
31	Gallons in a Tote
32	3.5 Gallon Pail
34	3 oz.
36	2 Gallon Kit
44	5 LB Tub
45	8.2 LB per Gallon
47	Zinc Clad Zinc DST22# Can
48	16 - 24 lbs. In a 1 gallon pail
50	50 lb bag
51	lbs. In 5 Gallon Pkg (40-60 lbs)
52	lbs in Bag up to 80 lbs
53	(5 gallon) 8 lb. Pail
57	lbs in 1/2 Drum up to 480 lbs
58	lbs in Drum over 481 lbs
60	lbs in a Tank Wagon
61	Gallons in a Tote
65	1/4 Purdy Cover
66	3/8 Purdy Cover
67	1/2 Purdy Cover
71	1" Purdy Cover
73	1 1/2" Purdy Brush
75	2" Purdy Brush
77	2 1/2" Purdy Brush
78	3" Purdy Brush
79	3 1/2" Purdy Brush
80	4" Purdy Brush
84	3" & 6" Weaver

86	7" Purdy Frame
88	Edge Tool
89	9" Purdy Frame
92	14" Purdy Complete
94	24" Purdy Complete
95	Armour Seal-480sq/ft
99	Each

PKG05	352 Description	X	AN	1/80
PKG06	400 Unit Load Option Code	O	ID	2/2
	01 Palletized			
	04 Slip Sheet			

Segment: CTT Transaction Totals

Position: 010

Loop:

Level: Summary

Usage: Mandatory

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set.

Syntax: 1 If either CTT03 or CTT04 are present, then the others are required.
 2 If either CTT05 or CTT06 are present, then the others are required.

Semantics:

Comments: This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

Ref Des	Ref No Name	Attributes
CTT01	354 Number of Line Items	M NO 1/6
CTT02	347 Hash Total <i>Not Used</i>	O R 1/10
CTT03	81 Weight <i>Not Used</i>	C R 1/10
CTT04	355 Unit or Basis for Measurement Code <i>Not Used</i>	C ID 2/2
CTT05	183 Volume <i>Not Used</i>	C R 1/8
CTT06	355 <i>Not Used</i>	C ID 2/2
CTT07	352 Description <i>Not Used</i>	O AN 1/80

Segment: CTT Transaction Totals

Segment: SE Transaction Set Trailer

Position: 020

Loop:

Level: Summary

Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

Syntax:

Semantics:

Comments: SE is the last segment of each transaction set.

Data Element Summary

Ref Des	Ref No Name	Attributes
SE01	96 Number of Included Segments	M NO 1/10
SE02	329 Transaction Set Control Number	M AN 4/9