

Materialogic EDI Spec - 850

Overview

This document defines the subset of the ANSI Standard version 4010 EDI Purchase Order Transaction Set (850), which is utilized by Materialogic's Third-Party-Logistics (3PL) operation.

This document is sent by Trading Partners to Materialogic to create Requisitions for materials to be distributed by Materialogic on behalf of our clients.

Audience

This document is written and intended for Materialogic's EDI Trading Partners. It assumes a reasonable level of knowledge of EDI ANSI X12 transactional documents, and a basic familiarity with Materialogic's operations.

Specification

Overview

The overall layout of this document (i.e., sequence of segments) is defined as follows. Any standard segment not listed is not used by Materialogic at this time.

Header

ID	Segment Name	Loop	Repeat	Max Use	Usage
ISA	Interchange Control Header			1	Required
GS	Functional Group Header			1	Required
ST	Transaction Set Header			1	Required
BEG	Beginning Segment for Purchase Order			1	Required
REF	Reference Identification			1	Required
TD5	Carrier Details (Routing Sequence/Transit Time)			1	Required
N1	Name	N1	2	1	Required
N2	Additional Name Information	N1		1	Optional
N3	Address Information	N1		2	Required
N4	Geographic Location	N1		1	Required
PER	Administrative Communications Contact	N1		1	Optional

Detail

ID	Segment Name	Loop	Repeat	Max Use	Usage
PO1	Baseline Item Data	PO1	1000	1	Required
PID	Product/Item Description	PO1		1	Optional
SAC	Service, Promotion, Allowance, or Charge Information	PO1		1	Optional

Footer

ID	Segment Name	Loop	Repeat	Max Use	Usage
CTT	Transaction Totals			1	Required
SE	Transaction Set Trailer			1	Optional
GE	Functional Group Trailer			1	Optional
IEA	Interchange Control Trailer			1	Optional

Segment Details

The details for each individual segment used in this document (i.e., meaning of individual elements) is defined below. Materialogic's required or supported values are listed in the Comments field. Any element not listed is not used by Materialogic at this time.

ISA - Interchange Control Header

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Ref.	Element Name, Notes	Min/Max	Comments
ISA01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information	2/2	"00"
ISA02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	10/10	<i>Blank</i>
ISA03	Security Information Qualifier Description: Code to identify the type of information in the Security Information	2/2	"00"
ISA04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	10/10	<i>Blank</i>

ISA05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	2/2	Partner specified value.
ISA06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element.	15/15	Partner specified value.
ISA07	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	2/2	Materialogic value: "ZZ"
ISA08	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	15/15	Materialogic Production value: "3149977342P" Test value: "3149977342T"
ISA09	Interchange Date Description: Date of the interchange	6/6	Format: YYMMDD
ISA10	Interchange Time Description: Time of the interchange	4/4	Format: HHMM
ISA11	Interchange Control Standards Identifier Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer	1/1	"U"
ISA12	Interchange Control Version Number Description: This version number covers the interchange control segments	5/5	"00401"
ISA13	Interchange Control Number Description: A control number assigned by the interchange sender	9/9	Required unique value.
ISA14	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1)	1/1	"0"

ISA15	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information	1/1	Production value: "P" Test value: "T"
ISA16	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	1/1	">"

GS - Functional Group Header

To indicate the beginning of a functional group and to provide control information

Ref.	Element Name, Notes	Min/Max	Comments
GS01	Functional Identifier Code Description: Code identifying a group of application related transaction sets	2/2	"PO"
GS02	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading partners	2/15	Partner specified value.
GS03	Application Receiver's Code Description: Code identifying party receiving transmission. Codes agreed to by trading partners	2/15	Materialogic Production value: "3149977342P" Test value: "3149977342T"
GS04	Date Description: Date expressed as CCYYMMDD	8/8	Format: CCYYMMDD
GS05	Time Description: Time expressed in 24-hour clock time as HHMM.	4/4	Format: HHMM
GS06	Group Control Number Description: Assigned number originated and maintained by the sender	1/9	Required unique value.
GS07	Responsible Agency Code Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard	1/2	"X"

GS08	Version / Release / Industry Identifier Code Description: Code indicating the version, release, sub release, and industry identifier of the EDI standard being used, including the GS and GE segments; positions 1-3 are the version number; positions 4-6 are the release and sub release, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user);	1/12	"004010"
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ST - Transaction Set Header

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

Ref.	Element Name, Notes	Min/Max	Comments
ST01	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set	3/3	"850"
ST02	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	4/9	Required unique value.

BEG - Beginning Segment for Purchase Order

To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

Ref.	Element Name, Notes	Min/Max	Comments
BEG01	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	2/2	"00" = Original
BEG02	Purchase Order Type Code Description: Code specifying the type of Purchase Order	2/2	"SA" = Stand Alone order
BEG03	Purchase Order Number Description: Identifying number for Purchase Order assigned by the orderer/purchaser	1/22	Partner's purchase order number
BEG05	Date Description: Date expressed as CCYYMMDD	8/8	Format: CCYYMMDD

REF - Reference Identification

To specify identifying information

Ref.	Element Name, Notes	Min/Max	Comments
REF01	Reference Identification Qualifier Description: Code qualifying the Reference Identification	2/3	See Qualifier definitions below.
REF02	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	1/30	
REF03	Description Description: A free-form description to clarify the related data elements and their content	1/80	

The following Qualifiers are supported by Materialogic's standard document set.

Note: Additional REF segments, with mutually agreed upon Qualifiers, may also be used depending on the Partner's requirements.

REF01 Qualifier definitions:

Qualifier	Definition	Comments
IT	Internal Customer Number Materialogic's client Inventory Number (REF02) and Name (REF03)	Expected value(s) will shared by Materialogic during implementation.
OS	Order Source Indicator of the upstream party for whom the order is being placed.	Expected value(s) will shared by Materialogic during implementation.
IT	Integration Partner Indicator of the upstream party which is sending the order to Materialogic, on behalf of the Order Source.	Expected value(s) will shared by Materialogic during implementation.
DP	Department Number	Partner-specified value.
MF	Mark For	Partner-specified value.

TD5 - Carrier Details (Routing Sequence/Transit Time)

To specify the carrier, sequence of routing and to provide transit time information.

Note: Depending on Partner's LTL shipping requirements, Materialogic's standard TD5 segment may be adjusted and/or replaced by other appropriate segments.

Ref.	Element Name, Notes	Min/Max	Comments
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TD502	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	1/2	"94"
TD503	Identification Code Description: Code identifying a party or other code	2/80	One of: "UPS", "FEDEX", "USPS".
TD505	Routing Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	1/35	Descriptive name of carrier and service level, specified in TD503 and TD512.
TD512	Service Level Code Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier	2/2	"ON" = Overnight, "ND" = Next day air, "SC" = Second day air, "3D" = Third day service, "SG" = Standard Ground.

N1 - Name

To identify a party by type of organization, name, and code

Ref.	Element Name, Notes	Min/Max	Comments
N101	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	2/3	"BT" = Bill To, "ST" = Ship To.
N102	Name Description: Free-form name	1/60	

N2 - Additional Name Information

To specify additional names or those longer than 35 characters in length

Ref.	Element Name, Notes	Min/Max	Comments
N201	Name Description: Free-form name	1/60	

N3 - Address Information

To specify the location of the named party

Ref.	Element Name, Notes	Min/Max	Comments
N301	Address Information Description: Address information	1/55	
N302	Address Information Description: Address information	1/55	

N4 - Geographic Location

To specify the geographic place of the named party

Ref.	Element Name, Notes	Min/Max	Comments
N401	City Name Description: Free-form text for city name	2/30	
N402	State or Province Code Description: Code (Standard State/Province) as defined by appropriate government agency	2/2	
N403	Postal Code Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	3/15	
N404	Country Code Description: Code identifying the country	2/3	

PER - Administrative Communications Contact

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

Ref.	Element Name, Notes	Min/Max	Comments
PER01	Contact Function Code Description: Code qualifying the Reference Identification	2/2	"CN" = General Contact.
PER05	Communication Number Qualifier Description: Code identifying the type of communication number	2/2	"TE" = Telephone.

PER06	Communication Number Description: Complete communications number including country or area code when applicable	1/80	
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PO1 - Baseline Item Data

To specify basic and most frequently used line item data

Ref.	Element Name, Notes	Min/Max	Comments
PO101	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	1/20	P.O. Line Number.
PO102	Quantity Ordered Description: Quantity ordered	1/15	
PO103	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	2/2	"EA" = Each.
PO104	Unit Price Description: Price per unit of product, service, commodity, etc.	1/17	Format: D.CC (Dollars.Cents)
PO106	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	2/2	"CN" = Materialogic item Control Number.
PO107	Product/Service ID Description: Identifying number for a product or service	1/48	
PO108	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	2/2	"BP" = Buyer's part number.
PO109	Product/Service ID Description: Identifying number for a product or service	1/48	

Note: Additional PO1 Qualifier/ID pairs, with mutually agreed upon Qualifiers, may also be used depending on the Partner's requirements.

PID - Product/Item Description

To describe a product or process in coded or free-form format

Ref.	Element Name, Notes	Min/Max	Comments
PID01	Item Description Type Description: Code indicating the format of a description	1/1	"F" = Free-form
PID05	Description Description: A free-form description to clarify the related data elements and their content	1/80	Free-form item description.

SAC - Service, Promotion, Allowance, or Charge information

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Ref.	Element Name, Notes	Min/Max	Comments
SAC01	Description: Code which indicates an allowance or charge for the service specified	1/1	"A" = Allowance, "C" = Charge.
SAC02	Description: Code identifying the service, promotion, allowance, or charge	4/4	"C310" = Discount, "H850" = Tax.
SAC05	Amount Description: Monetary amount	1/15	Format: D.CC (Dollars.Cents)

CTT - Transaction Totals

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

Ref.	Element Name, Notes	Min/Max	Comments
CTT01	Number of Line Items Description: Total number of line items in the transaction set	1/6	Number of PO1 segments in this transaction set.

SE - Transaction Set Trailer

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

Ref.	Element Name, Notes	Min/Max	Comments
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SE01	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	1/10	
SE02	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	4/9	

GE - Functional Group Trailer

To indicate the end of a functional group and to provide control information

Ref.	Element Name, Notes	Min/Max	Comments
GE01	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	1/6	
GE02	Group Control Number Description: Assigned number originated and maintained by the sender	1/9	

IEA - Interchange Control Trailer

To define the end of an interchange of zero or more functional groups and interchange-related control segments

Ref.	Element Name, Notes	Min/Max	Comments
IEA01	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	1/5	
IEA02	Interchange Control Number Description: A control number assigned by the interchange sender	9/9	

Example Document

An example usage of this document is given below.

This example shows an order placed on 11/16/2010 in Materialogic's Demo Inventory 9999, for 2 line items, the first, quantity 1 of Materialogic control number **WIDGET-101**, the second, quantity 5 of control number **PART-17**. The order has a bill-to address of John Doe / 123 Main Street / Suite 1234 / Nowhere, MO 63101 / 314-555-1234, and a ship-to address of Acme Corp / Jane Smith / 987 Fake Street / Nowhere, MO 63101. The order is requested to ship via UPS Ground service.

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ISA*00*          *00*          *ZZ*0123456789      *ZZ*3149977342T
*101117*1200*U*00401*011111112*0*T*>
GS*PO*0123456789*3149977342T*20101117*1200*022222223*X*004010
ST*850*03334
BEG*00*SA*05555556**20101116
REF*IT*9999*DEMO INVENTORY
REF*OS*4*ACME STORES
REF*IP*7*ACME EDI GATEWAY
TD5***UPS*UPS GROUND*SG
N1*BT*JOHN DOE
N3*123 MAIN STREET*SUITE 1234
N4*NOWHERE*MO*63101*US
PER*****TE*314-555-1234
N1*ST*ACME CORP
N2*JANE SMITH
N3*987 FAKE STREET
N4*NOWHERE*MO*63101*US
PO1*1*1*EA*9.99**CN*WIDGET-101*BP*101WG
PID*F***Widget number 101
SAC*C*H850***0.74
SAC*A*C310***1.00
PO1*2*5*EA*19.99**CN*PART-17*BP*17WG
PID*F***Part 17
SAC*C*H850***1.62
CTT*2
SE*20*03334
GE*1*022222223
IEA*1*011111112
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