



850 Purchase Order	
Functional Group=PO	Version 004030 X12
Mapping Procedures and Tips on Whole Foods 850 Document	
<p>Whole Foods utilizes the 850 Purchase Order Transaction Set for all divisions within the company. The 850 Transaction Set can be used to provide for customary and established business and industry practice relative to the placement of purchase orders for goods and services. This Transaction Set should not be used to convey purchase order changes or purchase order acknowledgment information.</p>	

Header:

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max Use</u>	<u>Loop Repeat</u>
0100	ST	Transaction Set Header	M	1	
0200	BEG	Beginning Segment for Purchase Order	M	1	
0400	CUR	Currency	O	1	
0600	PER	Administrative Communications Contact	O	1	
Loop ID – SAC					25
1200	SAC	Service, Promotion, Allowance or Charge	O	1	
1500	DTM	Date/Time Reference	O	1	
Loop ID – N9					1000
2950	N9	Reference Identification	O	1	
3000	MTX	Text	O	>1	
Loop ID – N1					3
3100	N1	Name	O	1	



Detail:

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max Use</u>	<u>Loop Repeat</u>
Loop ID – PO1					100000
0100	PO1	Baseline Item Data	M	1	1
0500	PID	Product/Item Description	O	1	1
0900	PO4	Item Physical Details	O	1	1
Loop ID – PO1/SAC					25
1300	SAC	Service, Promotion, Allowance, or Charge	O	1	1
6000	AMT	Monetary Amount	O	1	

Summary:

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max Use</u>	<u>Loop Repeat</u>
030	SE	Transaction Set Trailer	M	1	



ISA Interchange Control Header

Usage: Mandatory
Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req.</u>	<u>Type</u>	<u>Min/Max</u>
ISA01	I01	Authorization Information Qualifier <u>Code</u> <u>Description</u> 00 No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2
ISA02	I02	Authorization Information <i>Will be blank</i>	M	AN	10/10
ISA03	I03	Security Information Qualifier <u>Code</u> <u>Description</u> 00 No Security Information Present (No Meaningful Information in I04)	M	ID	2/2
ISA04	I04	Security Information <i>Will be blank</i>	M	AN	10/10
ISA05	I05	Interchange ID Qualifier <u>Code</u> <u>Description</u> 01 Duns (Dun and Bradstreet)	M	ID	2/2
ISA06	I06	Interchange Sender ID <i>"196175616" + Regional Designator</i>	M	AN	15/15
		Regional Designators Florida = FL Mid-Atlantic = MA Midwest = MW North Atlantic = NA Northeast = NE Northern California = NC Pacific Northwest = PN Rocky Mountain = RM South = SO South Pacific = SP Southwest = SW United Kingdom = UK			
ISA07	I05	Interchange ID Qualifier <i>Receiver Qualifier</i>	M	ID	2/2
ISA08	I07	Interchange Receiver ID <i>Receiver ISA</i>	M	AN	15/15
ISA09	I08	Interchange Date <i>In format YYMMDD</i>	M	DT	6/6
ISA10	I09	Interchange Time <i>In format HHMM</i>	M	TM	4/4
ISA11	I65	Repetition Separator <i>"U"</i>	M		1/1



ISA12	I11	Interchange Control Version Number "00403"	M	ID	5/5
ISA13	I12	Interchange Control Number	M	N0	9/9
ISA14	I13	Acknowledgment Requested "0"	M	ID	1/1
ISA15	I14	Interchange Usage Indicator "T" (Test) or "P" (Production)	M	ID	1/1
ISA16	I14	Component Element Separator ">"	M		1/1



GS Functional Group Header

Usage: Mandatory
Purpose: To indicate the beginning of a functional group and to provide control information.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req.</u>	<u>Type</u>	<u>Min/Max</u>
GS01	479	Functional Identifier Code <u>Code</u> <u>Description</u> PO Purchase Order (850)	M	ID	2/2
GS02	142	Application Sender's Code "196175616" + <i>Regional Designator</i> Regional Designators Florida = FL Mid-Atlantic = MA Midwest = MW North Atlantic = NA Northeast = NE Northern California = NC Pacific Northwest = PN Rocky Mountain = RM South = SO South Pacific = SP Southwest = SW United Kingdom = UK	M	AN	2/15
GS03	124	Application Receiver's Code <i>Receiver GS ID</i>	M	AN	2/15
GS04	373	Date <i>In format YYYYMMDD</i>	M	DT	8/8
GS05	337	Time <i>In format HHMM</i>	M	TM	4/8
GS06	28	Group Control Number	M	N0	1/9
GS07	455	Responsible Agency Code <u>Code</u> <u>Description</u> X Accredited Standards Committee X12	M	ID	1/2
GS08	480	Version/Release/Industry Identifier Code "004030"	M	AN	1/12



ST Transaction Set Header

Position: 010
Max Use: 1
Level: Header
Usage: Mandatory
Loop: N/A
Elements: 2
Purpose: To indicate the start of a transaction set and to assign a control number

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
ST01	143	Transaction Set Identifier Code	M	ID	3/3
		<u>Code</u> <u>Description</u>			
		850 Purchase Order			
ST02	329	Transaction Set Control Number	M	AN	4/9

BEG Beginning Segment for Purchase Order

Position: 0200
Max Use: 1
Level: Heading
Usage: Mandatory
Loop: N/A
Elements: 4
Purpose: To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
BEG01	353	Transaction Set Purpose Code	M	ID	2/2
		<u>Code</u> <u>Name</u>			
		00 Original			
BEG02	92	Purchase Order Type Code	M	ID	2/2
		<u>Code</u> <u>Name</u>			
		DS Drop Shipment			
		SA Stand Alone Order			
BEG03	324	Purchase Order Number	M	N0	1/22
BEG05	373	Purchase Order Date	M	DT	8/8
		<i>Date expressed as CCYYMMDD</i>			



CUR Currency

Position: 0400
Max Use: 1
Level: Heading
Usage: Optional
Loop: N/A
Elements: 2
Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
CUR01	98	Entity Identifier Code <u>Code</u> <u>Name</u> BY Buying Party	M	ID	2/3
CUR02	100	Currency Code <u>Code</u> <u>Name</u> USD U.S. Dollars	M	ID	3/3

PER Administrative Communications Contact

Position: 0600
Max Use: 1
Level: Heading
Usage: Optional
Loop: N/A
Elements: 4
Purpose: To identify a person or office to whom administrative communications should be directed.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
PER01	366	Contact Function Code <u>Code</u> <u>Name</u> BD Buyer Contact IC Information Contact (Store) PJ Project Manager (Team Leader)	M	ID	2/2
PER02	93	Name	O	AN	1/60
PER03	365	Communication Number Qualifier <u>Code</u> <u>Name</u> EM Electronic Mail TE Telephone	M	ID	2/2
PER04	364	Communication Number	M	AN	1/80



SAC Service, Promotion, Allowance, or Charge Information

Position: 1300
Max Use: 1
Level: Header
Usage: Optional
Loop: SAC
Elements: 5
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
SAC01	248	Allowance or Charge Indicator <u>Code</u> <u>Name</u> A Allowance	M	ID	1/2
SAC02	1300	Service, Promotion, Allowance, or Charge Code <u>Code</u> <u>Name</u> C310 Invoice Level Discount	M	ID	4/4
SAC05	610	Amount	X	N2	1/15
SAC06	378	Allowance/Charge Percent Qualifier <u>Code</u> <u>Name</u> Z Mutually Defined	X	ID	1/1
SAC07	332	Percent	X	R	1/6

DTM Date/Time Reference

Position: 1500
Max Use: 1
Level: Heading
Usage: Optional
Loop: N/A
Elements: 2
Purpose: To specify pertinent dates and times.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
DTM01	374	Date/Time Qualifier <u>Code</u> <u>Name</u> 002 Delivery Requested (Expected Date)	M	ID	3/3
DTM02	373	Date <i>Date expressed as CCYYMMDD</i>	M	DT	8/8



N9 Reference Identification

Position: 2950
Max Use: 1
Level: Heading
Usage: Optional
Loop: N9
Elements: 2
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
N901	128	Reference Identification Qualifier <u>Code</u> <u>Name</u> L1 Letters or Notes	M	ID	2/3
N902	127	Reference Identification	M	AN	1/30

MTX Text

Position: 3000
Max Use: >1
Level: Heading
Usage: Optional
Loop: N9
Elements: 1
Purpose: To provide a free-form format that allows the transmission of text information.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
MTX02	1551	Message Text	M	AN	1/4096



N1

Name

Position: 3100
Max Use: 1 per N1 loop; max 3 N1 loops
Level: Heading
Usage: Optional
Loop: N1
Elements: 4
Purpose: To identify a party by type of organization, name and code.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
N101	98	Entity Identifier Code <u>Code</u> <u>Name</u> BT Bill To SF Ship From SN Store Name ST Ship To U4 Team (Sub-team) VN Vendor	M	ID	2/3
N102	93	Name	M	AN	1/60
N103	66	Identification Code Qualifier <u>Code</u> <u>Name</u> 9 Duns+4 – use when N101 = "SF" 91 Assigned by Seller – use when N101 = "ST" 92 Assigned by Buyer – use when N101 = "BT", "SN", "U4" or "VN"	M	ID	1/2
N104	67	Identification Code <i>101 (store number when N101 = ST or SN and N103 = 91 or 92)</i> <i>10-char value, padded with leading zeroes (Vendor ID when N101 = VN and N103 = 92)</i> <i>196175616SO (DUNS + Regional Designator when N103 = "92" and N101 = "BT")</i>	M	AN	2/80

Regional Designators

Florida = FL
 Mid-Atlantic = MA
 Midwest = MW
 North Atlantic = NA
 Northeast = NE
 Northern California = NC
 Pacific Northwest = PN
 Rocky Mountain = RM
 South = SO
 South Pacific = SP
 Southwest = SW
 United Kingdom = UK



PO1 Baseline Item Data

Position: 0100
Max Use: 1
Level: Detail
Usage: Mandatory
Loop: PO1
Elements: 8
Purpose: To specify basic and most frequently used line item data.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
PO101	350	Assigned ID	O	AN	1/20
PO102	330	Quantity Ordered	M	R	1/15
PO103	355	Unit or Basis for Measurement Code <i>Note: See Appendix A for valid Units of Measure</i>	M	ID	2/2
PO104	212	Unit Price	M	R	1/17
PO106	235	Product/Service ID Qualifier <u>Code</u> <u>Name</u> UP UCC - 12	M	ID	2/2
PO107	234	Product/Service ID	M	AN	1/48
PO108	235	Product/Service ID Qualifier <u>Code</u> <u>Name</u> VC Vendor's Catalog Number	C	ID	2/2
PO109	234	Product/Service ID	C	AN	1/48

Syntax:

1. PO106 P0607 – If PO106 or PO107 is present, then the other is required.
2. PO108 P0809 – If PO108 or PO109 is present, then the other is required.



PID Product/Item Description

Position: 0500
Max Use: 1
Level: Detail
Usage: Optional
Loop: PO1/PID
Elements: 2
Purpose: To describe a product or process in coded or free form format.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
PID01	349	Item Description Type <u>Code</u> <u>Name</u> F Free Form	M	ID	1/1
PID05	352	Description	M	AN	1/80

PO4 Item Physical Details

Position: 0900
Max Use: 1
Level: Detail
Usage: Optional
Loop: PO1
Elements: 3
Purpose: To specify the physical qualities, packaging, weights, and dimensions relating to the item.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
PO401	356	Pack	O	N0	1/6
PO402	357	Size	O	R	1/8
PO403	355	Unit or Basis for Measurement Code <i>Note: See Appendix A for valid Units of Measure</i>	O	ID	2/2

Syntax:

1. PO402 P0203 – If PO402 or PO403 is present, then the other is required.



SAC Service, Promotion, Allowance, or Charge Information

Position: 1300
Max Use: 1
Level: Detail
Usage: Optional
Loop: PO1/SAC
Elements: 7
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
SAC01	248	Allowance or Charge Indicator <u>Code</u> <u>Name</u> A Allowance – used when SAC02 = 'C310' or 'D170' C Charge – used when SAC02 = 'D200'	M	ID	1/2
SAC02	1300	Service, Promotion, Allowance, or Charge Code <u>Code</u> <u>Name</u> C310 Invoice Level Discount – will use either SAC05 or SAC06/07 D170 Free Goods – will use SAC09/10 D200 Freight Charge – will use SAC05	M	ID	4/4
SAC05	610	Amount <i>Note: SAC05 will be used when SAC02 = 'D200'</i> <i>Note: SAC05 can be used when SAC02 = 'C310'</i>	X	N2	1/15
SAC06	378	Allowance/Charge Percent Qualifier <u>Code</u> <u>Name</u> Z Mutually Defined <i>Note: SAC06 can be used when SAC02 = 'C310'</i>	X	ID	1/1
SAC07	332	Percent <i>Note: SAC07 can be used when SAC02 = 'C310'</i>	X	R	1/6
SAC09	355	Unit or Basis for Measurement Code <i>Note: See Appendix A for valid Units of Measure</i> <i>Note: SAC09 will be used when SAC02 = 'D170'</i>	X	ID	2/2
SAC10	380	Quantity <i>Note: SAC10 will be used when SAC02 = 'D170'</i>	X	R	1/15



AMT Transaction Totals

Position: 6000
Max Use: 1
Level: Detail
Usage: Optional
Loop: PO1
Elements: 2
Purpose: To indicate the total monetary amount.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
AMT01	522	Amount Qualifier Code <u>Code</u> <u>Name</u> 1 Line Item Total (Extended Line Item Cost)	M	ID	1/3
AMT02	782	Monetary Amount	M	R	1/18

SE Transaction Set Trailer

Position: 030
Max Use: 1
Level: Summary
Usage: Mandatory
Loop: N/A
Elements: 2
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).

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max
SE01	96	Number of included Segments	M	N0	1/10
SE02	329	Transaction Set Control Number	M	AN	4/9

GE Functional Group Trailer

Usage: Mandatory
Purpose: To indicate the end of a functional group and to provide control information.

Element Summary:

Ref	Id	Element Name	Req.	Type	Min/Max
GE01	97	Number of Transaction Sets Included	M	N0	1/6
GE02	28	Group Control Number	M	N0	1/9



IEA Interchange Control Trailer

Usage Mandatory
Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req.</u>	<u>Type</u>	<u>Min/Max</u>
IEA01	I16	Number of Included Functional Groups	M	N0	1/5
IEA02	I12	Interchange Control Number	M	N0	9/9



850 PURCHASE ORDER - SAMPLE DATA

ISA*00* *00* *01*196175616SO *01*xxxxxxxxxx *050503*1630*U*00403*810112567*0*P*>~

GS*PO*196175616SO*xxxxxxxx*20050503*1630*810112567*X*004030~

ST*850*031047724~

BEG*00*SA*0000123456**20050502~

CUR*BY*USD~

PER*BD*BUYER [NAME*EM*FIRST.LAST@COMPANY.COM~](#)

PER*PJ*TEAM LEADER [NAME*EM*FIRST.LAST@COMPANY.COM~](#)

PER*IC**TE*(555) 555-5555~

SAC*A*C310***2500~

DTM*002*20070201~

N9*L1*P.O. NOTES~

MTX**FREE FORM TEXT~

N1*VN**company name**1*xxxxxxxxxx~

N1*SN*WFM ACD FROZEN*92*10176~

N1*U4*TEAM NAME*92*1111~

N1*ST*WHOLE FDS SC#8 RB/GROC-REG*91*01627919~

N1*SF*SHIP FROM NAME*9*0569813430032~

N1*BT*BILL TO NAME*92*196175616SO~

PO1*1*12*EA*2.26**UP*xxxxxxxx*VC*xxxxxx~

PID*F****SPECIAL FLOUR 2 LB~

PO4*9*2*LB~

AMT*1*27.12~

PO1*2*24*CA*.80**UP*071142000067*VC*080077~

PID*F****SPECIAL WATER 1 GAL~

PO4*9*1*LB~

SAC*A*C310***1.2~

AMT*1*19.2~

PO1*3*30*CA*2.10**UP*071142000104*VC*080093~

PID*F****SPECIAL COLA 12 OZ~

PO4*9*12*OZ~

SAC*C*D200***1.5~

AMT*1*63~

SE*22*031047724~

GE*1*810112567~

IEA*1*810112567~



Appendix A

Valid Units of Measure

<u>Code</u>	<u>Description</u>
1N	Count
AV	Capsule
BG	Bag
BX	Box
CA	Case
CT	Carton
CU	Cup
DA	Days
DZ	Dozen
EA	Each
FO	Fluid Ounce
FT	Foot
GA	Gallon
GH	Half Gallon
GR	Gram
H2	Half Liter
IN	Inch
KG	Kilogram
LB	Pound
LT	Liter
ME	Milligram
ML	Milliliter
OZ	Ounce – Av
PC	Piece
PH	Pack
PT	Pint
QT	Quart
SH	Sheet
TY	Tray
U2	Tablet
UN	Unit
X2	Bunch
YD	Yard