



Kroger Retail - EDI850

X12/V5010/850 : 850 Purchase Order

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Company:	KROGER
Modified:	3/17/2025
Notes:	EDI 850 Specifications for Kroger Retail Purchase orders

850 Purchase Order

Functional Group=PO

Purpose: This X12 Transaction Set contains the format and establishes the data contents of the Purchase Order Transaction Set (850) for use within the context of an Electronic Data Interchange (EDI) environment. The 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.

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0200	BEG	Beginning Segment for Purchase Order	M	1			Must use
0600	PER	Administrative Communications Contact	O	3			Used
0800	FOB	F.O.B. Related Instructions	O	>1			Used
1500	DTM	Date/Time Reference	O	10			Used
2200	PKG	Marking, Packaging, Loading	O	200			Used
2400	TD5	Carrier Details (Routing Sequence/Transit Time)	O	>1			Used
LOOP ID - N9					1000		
2950	N9	Extended Reference Information	O	1			Used
3000	MTX	Text	O	>1			Used
LOOP ID - N1					200		
3100	N1	Party Identification	O	1			Used
3300	N3	Party Location	O	2			Used
3400	N4	Geographic Location	O	>1			Used

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOOP ID - PO1					100000	N2/0100L	
0100	PO1	Baseline Item Data	M	1		N2/0100	Must use
LOOP ID - PID					1000		
0500	PID	Product/Item Description	O	1			Used
0900	PO4	Item Physical Details	O	>1			Used
LOOP ID - SAC					25		
1300	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
1700	TAX	Tax Reference	O	>1			Used

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOOP ID - CTT					1	N3/0100L	
0100	CTT	Transaction Totals	O	1		N3/0100	Used
0200	AMT	Monetary Amount	O	1		N3/0200	Used

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u> Information	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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BEG Beginning Segment for Purchase Order

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BEG01	353	Transaction Set Purpose Code	M	ID	2/2	Must use
		Description: Code identifying purpose of transaction set				
		Code Name				
		00		Original		
		06		Confirmation		
BEG02	92	Purchase Order Type Code	M	ID	2/2	Must use
		Description: Code specifying the type of Purchase Order				
		Code Name				
		NE		New Order		
BEG03	324	Purchase Order Number	M	AN	1/22	Must use
		Description: Identifying number for Purchase Order assigned by the orderer/purchaser				
		Note: 5 digit PO# number				
BEG05	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				

PER Administrative Communications Contact

Pos: 0600	Max: 3
Heading - Optional	
Loop: N/A	Elements: 4

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PER01	366	Contact Function Code Description: Code identifying the major duty or responsibility of the person or group named Code Name BD Buyer Name or Department	M	ID	2/2	Must use
PER02	93	Name Description: Free-form name	O	AN	1/60	Used
PER03	365	Communication Number Qualifier Description: Code identifying the type of communication number Code Name TE Telephone	X	ID	2/2	Used
PER04	364	Communication Number Description: Complete communications number including country or area code when applicable Note: Suppliers should use this number provided to initiate contact to the Buyer to resolve conflict on product IDs and shipping conditions, etc.	X	AN	1/256	Used

FOB F.O.B. Related Instructions

Pos: 0800	Max: >1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
FOB01	146	Shipment Method of Payment	M	ID	2/2	Must use
		Description: Code identifying payment terms for transportation charges				
FOB02	309	Location Qualifier	X	ID	1/2	Used
		Description: Code identifying type of location				
		<u>Code</u> <u>Name</u>				
		DE	Destination (Shipping)			
		OR	Origin (Shipping Point)			

DTM Date/Time Reference

Pos: 1500	Max: 10
Heading - Optional	
Loop: N/A	Elements: 4

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

Code Name

- 002 Delivery Requested
- 010 Requested Ship
- 704 Delivery Appointment Date and Time

DTM02	373	Date	X	DT	8/8	Used
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Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

DTM03	337	Time	X	TM	4/8	Used
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Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

DTM04	623	Time Code	O	ID	2/2	Used
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Description: Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

Code Name

- LT Local Time

PKG Marking, Packaging, Loading

Pos: 2200	Max: 200
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To describe marking, packaging, loading, and unloading requirements

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PKG02	753	Packaging Characteristic Code	O	ID	1/5	Used
		Description: Code specifying the marking, packaging, loading and related characteristics being described				
PKG06	400	Unit Load Option Code	X	ID	2/2	Used
		Description: Code identifying loading or unloading a shipment				
		Code Name				
		01	Palletized			

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 2400	Max: >1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To specify the carrier and sequence of routing and provide transit time information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD504	91	Transportation Method/Type Code	X	ID	1/2	Used
		Description: Code specifying the method or type of transportation for the shipment				
		<u>Code</u> <u>Name</u>				
		C Consolidation				
		H Customer Pickup				
		M Motor (Common Carrier)				
		R Rail				
		T Best Way (Shippers Option)				
TD505	387	Routing	X	AN	1/35	Used
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				

N9 Extended Reference Information

Pos: 2950	Max: 1
Heading - Optional	
Loop: N9	Elements: 2

User Option (Usage): Used

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	Reference Identification Qualifier	M	ID	2/3	Must use
		Description: Code qualifying the Reference Identification				
		Code Name				
		AN				Associated Purchase Orders
		CB				Combined Shipment
		SI				Shipper's Identifying Number for Shipment (SID)
		ZA				Supplier
N902	127	Reference Identification	X	AN	1/50	Must use
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

MTX Text

Pos: 3000	Max: >1
Heading - Optional	
Loop: N9	Elements: 1

User Option (Usage): Used

Purpose: To specify textual data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MTX02	1551	Textual Data	X	AN	1/4096	Must use

Description: To transmit large volumes of message text

N1 Party Identification

Pos: 3100	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use
<p>Description: Code identifying an organizational entity, a physical location, property or an individual</p> <p>Code Name</p> <p>BT Bill-to-Party</p> <p>BY Buying Party (Purchaser)</p> <p>ST Ship To</p> <p>VN Vendor</p> <p>WH Warehouse</p>						
N102	93	Name	X	AN	1/60	Must use
<p>Description: Free-form name</p>						
N103	66	Identification Code Qualifier	X	ID	1/2	Must use
<p>Description: Code designating the system/method of code structure used for Identification Code (67)</p> <p>Code Name</p> <p>9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix</p> <p>11 Drug Enforcement Administration (DEA)</p>						
N104	67	Identification Code	X	AN	2/80	Used
<p>Description: Code identifying a party or other code</p>						

N3 Party Location

Pos: 3300	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Must use
		Description: Address information				
N302	166	Address Information	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 3400	Max: >1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name	O	AN	2/30	Must use
		Description: Free-form text for city name				
N402	156	State or Province Code	X	ID	2/2	Must use
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	Postal Code	O	ID	3/15	Must use
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	Country Code	X	ID	2/3	Must use
		Description: Code identifying the country				

PO1 Baseline Item Data

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 9

User Option (Usage): Must use

Purpose: To specify basic and most frequently used line item data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO102	380	Quantity	X	R	1/15	Used
		Description: Numeric value of quantity				
PO103	355	Unit or Basis for Measurement Code	O	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<u>Code</u> <u>Name</u>				
		CA Case				
		EA Each				
PO104	212	Unit Price	X	R	1/17	Used
		Description: Price per unit of product, service, commodity, etc.				
PO106	235	Product/Service ID Qualifier	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<u>Code</u> <u>Name</u>				
		UA U.P.C./EAN Case Code (2-5-5)				
		UK GTIN 14-digit Data Structure				
PO107	234	Product/Service ID	X	AN	1/48	Used
		Description: Identifying number for a product or service				
PO108	235	Product/Service ID Qualifier	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		<u>Code</u> <u>Name</u>				
		PI Purchaser's Item Code				
PO109	234	Product/Service ID	X	AN	1/48	Used
		Description: Identifying number for a product or service				
PO110	235	Product/Service ID Qualifier	X	ID	2/2	Used
		Description: Code identifying the				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		type/source of the descriptive number used in Product/Service ID (234)				
		<u>Code Name</u>				
		PL Purchaser's Order Line Number				
PO111	234	Product/Service ID	X	AN	1/48	Used
		Description: Identifying number for a product or service				

PID Product/Item Description

Pos: 0500	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type	M	ID	1/1	Must use
		Description: Code indicating the format of a description				
		Code Name				
		F		Free-form		
PID05	352	Description	X	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

PO4 Item Physical Details

Pos: 0900	Max: >1
Detail - Optional	
Loop: PO1	Elements: 3

User Option (Usage): Used

Purpose: To specify the physical qualities, packaging, weights, and dimensions relating to the item

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO401	356	Pack	O	N0	1/6	Used
		Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container				
PO402	357	Size	X	R	1/8	Used
		Description: Size of supplier units in pack				
PO403	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

SAC Service, Promotion, Allowance, or Charge Information

Pos: 1300 Max: 1
 Detail - Optional
 Loop: SAC Elements: 10

User Option (Usage): Used

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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use
		Description: Code which indicates an allowance or charge for the service specified				
		Code Name				
		A		Allowance		
		C		Charge		
SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Must use
		Description: Code identifying the service, promotion, allowance, or charge				
		Code Name				
		B010		Cents Off		
		D200		Freight Charges to Destination		
		D280		Full Service		
		F340		Pick/Up		
		F910		Quantity Discount		
		H625		Tax - Beverage Tax		
		H850		Tax		
		I170		Trade Discount		
SAC05	610	Amount	O	N2	1/15	Used
		Description: Monetary amount				
SAC06	378	Allowance/Charge Percent Qualifier	X	ID	1/1	Used
		Description: Code indicating on what basis allowance or charge percent is calculated				
SAC07	332	Percent, Decimal Format	X	R	1/6	Must use
		Description: Percent given in decimal format (e.g., 0.0 through 100.0 represents 0% through 100%)				
SAC08	118	Rate	O	R	1/9	Must use
		Description: Rate expressed in the standard monetary denomination for the				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		currency specified				
SAC09	355	Unit or Basis for Measurement Code	X	ID	2/2	Must use
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
SAC10	380	Quantity	X	R	1/15	Must use
		Description: Numeric value of quantity				
SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Used
		Description: Code indicating method of handling for an allowance or charge				
		Code Name				
		02 Off Invoice				
		06 Charge to be Paid by Customer				
SAC15	352	Description	X	AN	1/80	Must use
		Description: A free-form description to clarify the related data elements and their content				

TAX Tax Reference

Pos: 1700	Max: >1
Detail - Optional	
Loop: PO1	Elements: 1

User Option (Usage): Used

Purpose: To provide data required for proper notification/determination of applicable taxes applying to the transaction or business described in the transaction

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TAX12	441	Tax Exempt Code	O	ID	1/1	Used

Description: Code identifying exemption status from sales and use tax

Code Name

- 1 Yes (Tax Exempt)
- 2 No (Not Tax Exempt)

CTT Transaction Totals

Pos: 0100 Max: 1
 Summary - Optional
 Loop: CTT Elements: 6

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				
CTT02	347	Hash Total	O	R	1/10	Used
		Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. 18E2 Fifth occurrence of value being hashed. ----- 1873 Hash Total				
CTT03	81	Weight	X	R	1/10	Used
		Description: Numeric value of weight				
CTT04	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		Code Name LB Pound				
CTT05	183	Volume	X	R	1/8	Used
		Description: Value of volumetric measure				
CTT06	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		Code Name CF Cubic Feet				

AMT Monetary Amount Information

Pos: 0200	Max: 1
Summary - Optional	
Loop: CTT	Elements: 2

User Option (Usage): Used

Purpose: To indicate the total monetary amount

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AMT01	522	Amount Qualifier Code	M	ID	1/3	Must use
Description: Code to qualify amount						
		<u>Code</u> <u>Name</u>				
		TT Total Transaction Amount				
AMT02	782	Monetary Amount	M	R	1/18	Must use
Description: Monetary amount						

Data Sample:

SAMPLE with ALL ITEMS Converted to GTINs

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BEG*00*NE*91042**20210912~
PER*BD*JACK PARKHURST*TE*513-387-1165~
FOB*PB~
DTM*002*20210916~
DTM*010*20210915~
DTM*704*20210915*2145*LT~
TD5***H~
N9*ZA*011C00UD~
N9*CB*01102666~
N9*SI*00101191042~
N9*AN*91043~
N9*AN*91047~
MTX**THIS PURCHASE ORDER IS SUBJECT TO THE TERMS AND CONDITIONS~
MTX**ON HTTP://EDI.KROGER.COM~
N1*ST*KROGER (KRG LLC)*9*0782260811103~
N3*2000 ANVIL BLOCK RD~
N4*FOREST PARK*GA*30297*US~
N1*BT*KROGER (KRG LLC)*9*0782260810000~
N3*THE KROGER COMPANY*P.O. BOX 305103~
N4*NASHVILLE*TN*372305103*US~
N1*VN*FOOD CORP*9*1234567891234~
PO1**200*CA*9.96**UK*10021000340799*PI*12345~
PID*F***FLOUR TORT 10CT~
PO4*12*11.5*OZ~
SAC*A*1170*****-1.9****02~
PO1**240*CA*13.68**UK*20043000180629*PI*45678~
PID*F***SM FLOUR TORT5 CT~
    
```

PO4*12*17.5*OZ~
 SAC*A*1170*****-4.54****02~
 CTT*3*680*9152*LB*393*CF~
 AMT*TT*6138.4~

SAMPLE with NO ITEMS Converted to GTINs

PO1**200*CA*9.96**UA*002100034079*PI*12345~
 PID*F****FLOUR TORT 10CT~
 PO4*12*11.5*OZ~
 SAC*A*1170*****-1.9****02~
 PO1**240*CA*13.68**UA*004300018062*PI*45678~
 PID*F****SM FLOUR TORT5 CT~
 PO4*12*17.5*OZ~ SAC*A*1170*****-4.54****02~
 CTT*3*680*9152*LB*393*CF~
 AMT*TT*6138.4~

SAMPLE with SOME ITEMS Converted to GTINs

Manufacturer ID 21000 has been converted
Manufacturer ID 43000 has NOT been converted

PO1**200*CA*9.96**UK*10021000340799*PI*12345~
 PID*F****FLOUR TORT 10CT~
 PO4*12*11.5*OZ~
 SAC*A*1170*****-1.9****02~
 PO1**240*CA*13.68**UA*004300018062*PI*45678~
 PID*F****SM FLOUR TORT5 CT~
 PO4*12*17.5*OZ~ SAC*A*1170*****-4.54****02~
 CTT*3*680*9152*LB*393*CF~
 AMT*TT*6138.4~