

## Introduction

This guideline provides a description and technical layout of the data segments sent in 3M's EDI Product Activity Data (ASC X12 transaction set 852). 3M can accept many valid ASC X12 data segments and elements; however, this guideline includes the data segments and elements most commonly sent.

The ASC X12 version presented in this guideline is 003050. If you cannot receive Product Activity Data in 003050, please consult your 3M EDI contact for information on other ASC X12 versions sent by 3M.

The majority of 3M EDI Product Activity Data will be sent to suppliers by 3M manufacturing facilities. There may be variations in the Product Activity Data sent to a supplier based on each manufacturing facility's requirements.

The purpose of this transaction is to communicate information to the supplier that will assist the supplier in providing complete shipments when they are needed by 3M. Suppliers receiving this transaction set will maintain some type of inventory/product movement records for 3M to enable replenishment calculations based on data provided by the 3M planner.

Some general comments are:

1. During implementation, a supplier receiving 3M EDI Product Activity Data will verify that 3M and the supplier have a common understanding of the meaning and use of the information being transmitted.
2. This transaction is used to share current inventory status, receipts, in transit information, product demands and adjustments with a supplier in order to assist the supplier in providing 3M with needed supplies on a timely basis
3. The 3M EDI Product Activity Data is used in conjunction with the 830 Planning Schedule with Release Capability (forecast) within a Supplier Managed Inventory (SMI) framework. In an SMI framework, the 856 Ship Notice/Manifest or the 855 Purchase Order Acknowledgment is used by the supplier to communicate shipment information back to the manufacturing facility. In these more complex cases, additional documentation will be provided by 3M.

An example of a paper product activity report and its ASC X12 interpretation can be found at the back of this guideline.

**Note: For illustration purposes only, all examples use an asterisk (\*) as the data element separator and a caret (^) as the segment terminator. In actual practice, values must be chosen that do not conflict with the data.**

# 852 Product Activity Data

Functional Group ID=**PD**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Activity Data Transaction Set (852) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used by a distributor, warehouse, or retailer to advise a trading partner of inventory, sales, and other product activity information. Product activity data enables a trading partner to plan and ship, or propose inventory replenishment quantities, for distribution centers, warehouses or retail outlets. The receiver of the transaction set will maintain some type of inventory/product movement records for its trading partners to enable replenishment calculations based on data provided by the distributor, warehouse or retailer.

## Heading:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
3	010	ST	Transaction Set Header	M	1		
4	020	XQ	Reporting Date/Action	M	1		
5	030	XPO	Preassigned Purchase Order Numbers	O	>1		
Not Used	040	N9	Reference Number	O	>1		
Not Used	050	PER	Administrative Communications Contact	O	3		
LOOP ID - N1						200	
6	060	N1	Name	O	1		n1
Not Used	070	N2	Additional Name Information	O	1		
Not Used	080	N3	Address Information	O	2		
Not Used	090	N4	Geographic Location	O	1		
Not Used	100	FOB	F.O.B. Related Instructions	O	1		
Not Used	110	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1		
Not Used	120	DTM	Date/Time Reference	O	>1		
Not Used	130	N9	Reference Number	O	>1		
Not Used	140	PER	Administrative Communications Contact	O	3		

## Detail:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - LIN						999999	
7	150	LIN	Item Identification	O	1		
Not Used	160	CTP	Pricing Information	O	25		
Not Used	170	PO4	Item Physical Details	O	1		
Not Used	171	N9	Reference Number	O	>1		
Not Used	175	AMT	Monetary Amount	O	10		
Not Used	176	PAL	Pallet Information	O	1		

### 3M Supplier Product Activity Data

Not Used	177	QTY	Quantity	O	1	
			LOOP ID - ZA		>1	
9	180	ZA	Product Activity Reporting	M	1	n2
Not Used	190	CTP	Pricing Information	O	25	
Not Used	200	SDQ	Destination Quantity	O	>1	

### Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
11	210	CTT	Transaction Totals	O	1		n3
12	220	SE	Transaction Set Trailer	M	1		

### Transaction Set Notes

1. The reporting location is required. The reporting location is specified explicitly in the N1 segment using the code RL in N101, or implicitly using the SDQ segment (Table 2) with the location data elements. They are mutually exclusive (the SDQ and the N1 with N101 containing RL).
2. The quantity for the item identified in the LIN segment is required. Quantity is specified either in the ZA segment (ZA02) or in the SDQ segment, but not in both.
3. The number of line items (CTT01) is the accumulation of the number of LIN segments. Hash total (CTT02) is not used in this transaction set.  
When sending item and activity data in the LIN loop, the CTT segment is required.

**3M Supplier Product Activity Data**

**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

**Syntax Notes:**

**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

**Comments:**

**Notes:** 3M Example(s): ST\*852\*000260406^

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Required	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 852 X12.52 Product Activity Data	M ID 3/3
Required	ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set Sender-assigned sequential control number to match control number on SE segment.	M AN 4/9

**3M Supplier Product Activity Data**

**Segment:** **XQ** Reporting Date/Action  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify reporting date and action to be taken  
**Syntax Notes:**  
**Semantic Notes:** 1 XQ02 is the reporting date. If reporting a date range, then XQ02 is the start date and XQ03 is the end date.  
**Comments:**  
**Notes:** 3M Example(s): XQ\*H\*000220^

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Required	XQ01	305		<b>Transaction Handling Code</b>	<b>M ID 1/2</b>
				Code designating the action to be taken by all parties	
				G Plan Order(s) and Ship Product	
				H Notification Only	
Required	XQ02	373		<b>Date</b>	<b>M DT 6/6</b>
				Date (YYMMDD)	
				'As of' inventory date. This transaction includes levels or amounts 'as of this date.	
	XQ03	373		<b>Date</b>	<b>O DT 6/6</b>
				Date (YYMMDD)	
				Used for range ending date.	

**3M Supplier Product Activity Data**

**Segment:** **XPO** Preassigned Purchase Order Numbers  
**Position:** 030  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To transmit preassigned purchase order numbers  
**Syntax Notes:** 1 If either XPO03 or XPO04 is present, then the other is required.  
**Semantic Notes:** 1 XPO01 is the preassigned purchase order number. If a range of purchase order numbers is to be transmitted, use XPO01 for the first number and XPO02 as the ending number.  
**Comments:** 1 XPO03 and XPO04 specify the location that the purchase order numbers apply to.  
**Notes:** 3M Example(s): XPO\*T204339^

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
Required	XPO01	324 Purchase Order Number	M AN 1/22
		Identifying number for Purchase Order assigned by the orderer/purchaser	
		This is optional based on agreement between the supplier and 3M. If transmitted, the supplier must reference this number when sending a corresponding 855 or 856 to 3M notifying 3M of a SMI shipment.	

### 3M Supplier Product Activity Data

**Segment:** **N1** Name  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:**

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

**Semantic Notes:**  
**Comments:**

- 1 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.
- 2 N105 and N106 further define the type of entity in N101.

**Notes:**

3M Comments: Required by 3M

3M Example(s): N1\*RL\*3M BROOKINGS\*92\*0090^

#### Data Element Summary

Ref.	Data	Attributes		
<u>Des.</u>	<u>Element</u> <u>Name</u>			
Required	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b>	<b>M ID 2/2</b>
			Code identifying an organizational entity, a physical location, or an individual	
		RL	Reporting Location	
		ST	Ship To	
	<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/35</b>
			Free-form name	
	<b>N103</b>	<b>66</b>	<b>Identification Code Qualifier</b>	<b>X ID 1/2</b>
			Code designating the system/method of code structure used for Identification Code (67)	
			N104 will contain the 3M assigned plant or facility code for the 3M facility reporting the product activity with or without the DUNS number. Suppliers that are supplying multiple 3M facilities may use this code to identify the different locations. Upon request, suppliers are provided with the table of 3M destination codes.	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		92	Assigned by Buyer or Buyer's Agent	
	<b>N104</b>	<b>67</b>	<b>Identification Code</b>	<b>X AN 2/20</b>
			Code identifying a party or other code	

### 3M Supplier Product Activity Data

<b>Segment:</b>	<b>LIN</b> Item Identification
<b>Position:</b>	150
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify basic item identification data
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If either LIN04 or LIN05 is present, then the other is required.</li> <li>2 If either LIN06 or LIN07 is present, then the other is required.</li> <li>3 If either LIN08 or LIN09 is present, then the other is required.</li> <li>4 If either LIN10 or LIN11 is present, then the other is required.</li> <li>5 If either LIN12 or LIN13 is present, then the other is required.</li> <li>6 If either LIN14 or LIN15 is present, then the other is required.</li> <li>7 If either LIN16 or LIN17 is present, then the other is required.</li> <li>8 If either LIN18 or LIN19 is present, then the other is required.</li> <li>9 If either LIN20 or LIN21 is present, then the other is required.</li> <li>10 If either LIN22 or LIN23 is present, then the other is required.</li> <li>11 If either LIN24 or LIN25 is present, then the other is required.</li> <li>12 If either LIN26 or LIN27 is present, then the other is required.</li> <li>13 If either LIN28 or LIN29 is present, then the other is required.</li> <li>14 If either LIN30 or LIN31 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 LIN01 is the line item identification
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 See the Data Dictionary for a complete list of ID's.</li> <li>2 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.</li> </ol>
<b>Notes:</b>	3M Comments: Required by 3M
	3M Example(s): LIN**BP*34999846511*PO*T204339^

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Required	LIN02	235	<b>Product/Service ID Qualifier</b>		<b>M ID 2/2</b>
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
				LIN03 will contain 3M's 11-digit product identification number without dashes.	
			BP	Buyer's Part Number	
Required	LIN03	234	<b>Product/Service ID</b>		<b>M AN 1/40</b>
				Identifying number for a product or service	
	LIN04	235	<b>Product/Service ID Qualifier</b>		<b>X ID 2/2</b>
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
				If the purchase order number is not referenced in the XPO segment it will be sent here.	

**3M Supplier Product Activity Data**

		PO	Purchase Order Number	
<b>LIN05</b>	<b>234</b>	<b>Product/Service ID</b>		<b>X AN 1/40</b>
		Identifying number for a product or service		

### 3M Supplier Product Activity Data

**Segment:** **ZA** Product Activity Reporting  
**Position:** 180  
**Loop:** ZA Mandatory  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To provide activity details concerning product being reported  
**Syntax Notes:**

- 1 If either ZA02 or ZA03 is present, then the other is required.
- 2 If either ZA04 or ZA05 is present, then the other is required.
- 3 If either ZA06 or ZA07 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:** 3M Comments: A supplier receiving 3M EDI Product Activity Data will verify that 3M and the supplier have a common understanding of the meaning and use of the information being transmitted.

3M Example(s):  
 ZA\*QA\*1390248\*EA^  
 ZA\*QL\*633600\*EA\*007\*000101^

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
Required	ZA01	859 Activity Code	M ID 2/2
		Code identifying activity details for the product being reported	
		QA	Current Inventory Quantity Available for Shipment or Sale Indicates the quantity currently available to be sold or shipped
		QD	Additional Demand Quantity
		QL	Minimum Inventory Quantity The minimum inventory quantity for replenishment purposes
		QM	Maximum Inventory Quantity The maximum inventory quantity for replenishment purposes
		QP	Quantity On Order, Not Yet Received Total quantity expected to be received from supplier for current reporting period, but not yet received
		QR	Quantity Received
		QS	Quantity Sold
		QT	Adjustment to Inventory Quantity
Required	ZA02	380 Quantity	X R 1/15
		Numeric value of quantity	
Required	ZA03	355 Unit or Basis for Measurement Code	X ID 2/2

**3M Supplier Product Activity Data**

			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
<b>ZA04</b>	<b>374</b>	<b>Date/Time Qualifier</b>		<b>X ID 3/3</b>
			Code specifying type of date or time, or both date and time	
		007	Effective	
			If the activity code is 'QM' (Maximum) or 'QL' (Minimum), this is the effective date of the change in maximum or minimum levels.	
		050	Received	
		102	Issue	
			If the activity code is 'QS,' this is used to indicate the date product was removed from inventory and consumed.	
<b>ZA05</b>	<b>373</b>	<b>Date</b>		<b>X DT 6/6</b>
			Date (YYMMDD)	
<b>ZA06</b>	<b>128</b>	<b>Reference Number Qualifier</b>		<b>X ID 2/2</b>
			Code qualifying the Reference Number.	
		BM	Bill of Lading Number	
<b>ZA07</b>	<b>127</b>	<b>Reference Number</b>		<b>X AN 1/30</b>
			Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	

**3M Supplier Product Activity Data**

**Segment:** **CTT** Transaction Totals  
**Position:** 210  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Syntax Notes:** 1 If either CTT03 or CTT04 is present, then the other is required.  
 2 If either CTT05 or CTT06 is present, then the other is required.

**Semantic Notes:**

**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

**Notes:** 3M Comments: Required by 3M

3M Example(s): CTT\*5^

**Data Element Summary**

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Required	CTT01	354	Number of Line Items
			Total number of line items in the transaction set
			This is the total number of LIN segments.

**3M Supplier Product Activity Data**

**Segment:** **SE** Transaction Set Trailer  
**Position:** 220  
**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 Notes:**

**Semantic Notes:**

**Comments:** 1 SE is the last segment of each transaction set.

**Notes:** 3M Example(s): SE\*26\*000260406^

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>		
	<b><u>Des.</u></b>	<b><u>Element</u></b>	<b><u>Name</u></b>	<b><u>Attributes</u></b>
<b>Required</b>	SE01	96	<b>Number of Included Segments</b>	<b>M N0 1/10</b>
			Total number of segments included in a transaction set including ST and SE segments	
<b>Required</b>	SE02	329	<b>Transaction Set Control Number</b>	<b>M AN 4/9</b>
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			This must match the control number on the ST segment for this transaction set.	

## Product Activity Data

This section contains an example to illustrate the use of Transaction Set 852.

### INVENTORY STATUS AS OF 02/20/2000

Purchase Order Number: **T204339**

Reporting Location: **3M Brookings, #0090  
200 N. Main Street  
Brookings SD 12345**

3M Part Number	Quantity Currently on Hand	Unit of Measure	Minimum Inventory Quantity	Effective Date of Change	Maximum Inventory Quantity	Effective Date of Change
34999846511	1,390,248	Each	633,600	1/1/2000	1,500,000	1/1/2000
34-9998-4663-6	642,432	Each	380,160		705,000	
34-9998-4675-0	264,000	Each	126,720		416,000	
34-9998-4687-5	126,720	Each	84,547		126,720	

3M Supplier Product Activity Data

**ASC X12 FORMAT**

ST\*852\*000260406^

XQ\*H\*000220^

XPO\*T204339^

N1\*RL\*3M BROOKINGS\*92\*0090^

LIN\*\*BP\*34999846511^

ZA\*QA\*1390248\*EA^

ZA\*QL\*633600\*EA\*007\*000101^

ZA\*QM\*1500000\*EA\*007\*000101^

LIN\*\*BP\*34999846636^

ZA\*QA\*642432\*EA^

ZA\*QL\*380160\*EA^

ZA\*QM\*705000\*EA^

LIN\*\*BP\*34999846750^

ZA\*QA\*264000\*EA^

ZA\*QL\*126720\*EA^

ZA\*QM\*416000\*EA^

LIN\*\*BP\*34999846875^

ZA\*QA\*126720\*EA^

ZA\*QL\*84547\*EA^

ZA\*QM\*126720\*EA^

CTT\*4^

**INTERPRETATION**

ASC X12 Transaction Set: 852

Transaction Set Control Number: 000260406

Notification of Inventory Status as of  
2/20/2000

Purchase Order Number: T204339

Reporting Location: 3M Brookings  
3M Assigned Facility Code: 0090  
200 N. Main Street  
Brookings, SD 12345

3M Part Number: 34999846511

Quantity Currently On Hand: 1,390,248 Each

Minimum Inventory Quantity: 633,600 Each  
Effective Date of Minimum Quantity: 1/1/2000

Maximum Inventory Quantity: 1,500,000 Each  
Effective Date of Maximum Quantity: 1/1/2000

3M Part Number: 34999846636

Quantity Currently On Hand: 642,432 Each

Minimum Inventory Quantity: 380,160 Each

Maximum Inventory Quantity: 705,000 Each

3M Part Number: 34999846750

Quantity Currently On Hand: 264,000 Each

Minimum Inventory Quantity: 126,720 Each

Maximum Inventory Quantity: 416,000 Each

3M Part Number 34999846875

Quantity Currently On Hand: 126,720 Each

Minimum Inventory Quantity: 84,547 Each

Maximum Inventory Quantity: 126,720 Each

Number of Line Items: 4

**3M Supplier Product Activity Data**

**SE\*22\*000260406^**

Number of Segments: 22

Transaction Set Control Number: 000260406

**NOTE: Sample contains fictitious data.**