

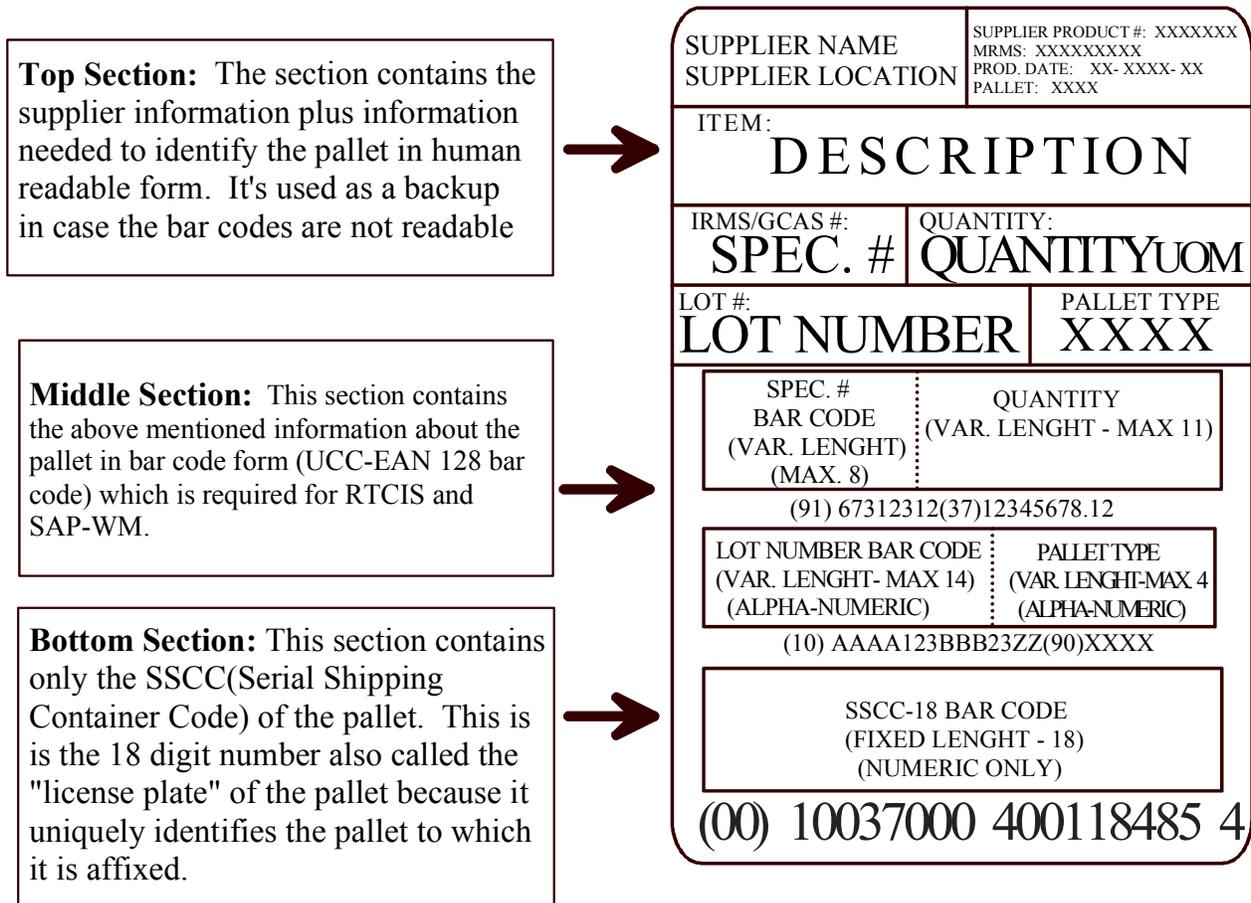


SECTION 1	BAR CODE SPECIFICATION	Page 1 of 4
DATE: 8/2002	TITLE: LABEL FORMAT	ISSUE: REV. 2

The following section provides the label format for labeling materials being delivered to P&G manufacturing sites. This format is based on the ANSI/UCC6 Application Standard for Shipping Container Codes and follows its guidelines in establishing this label specification.

The timing for beginning use of this specification for labeling vs previous labeling standards should be worked with individual plant sites. During the transition period, inventory may exist within P&G warehouses that is labeled under old standards as well as this newly established standard. P&G application software for inventory control will be able to utilize either label format during this transition phase of dual labeling standards.

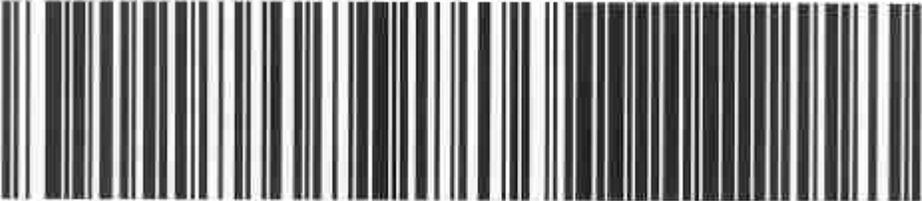
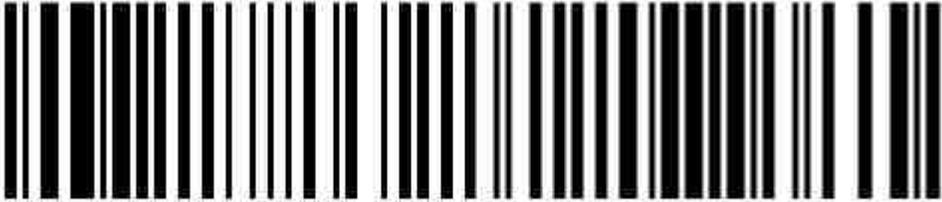
The following is the general label layout:



The next page shows an actual label sample:



SECTION 1	BAR CODE SPECIFICATION	Page 2 of 4
DATE: 8/2002	TITLE: LABEL FORMAT	ISSUE: REV. 2

TREDEGAR NEW BERN, NC	SUPPLIER PRODUCT #: 80614-01 MRMS: PROD. DATE: 03-16-01 PALLET: 0174997
ITEM: TRILAMINATE EAR	
IRMS/GCAS #: 12345678	QUANTITY: 12345678 M2.
LOT #: VEND1234567890	PALLET TYPE P6
 (91) 12345678(37)12345678	
 (10) VEND1234567890(90)P6	
 (00) 1 0037000 400118485 4	



SECTION 1	BAR CODE SPECIFICATION	Page 3 of 4
DATE: 8/2002	TITLE: LABEL FORMAT	ISSUE: REV. 2

Optional Data Fields:

The supplier can choose to also include their assigned EAN Product Number for the product they are providing to the P&G site on the label. If an Expiration Date is required for the material being delivered, this data should also be provided on the label. The following shows a possible label layout when both the EAN Product Number and Expiration Date are provided. Additional data fields can be provided on a label if P&G is notified of the application identifiers which will be used for these data fields.

Top Section: The section contains the supplier information plus information needed to identify the pallet in human readable form. It's used as a backup in case the bar codes are not readable

Middle Section: This section contains the above mentioned information about the pallet in bar code form (UCC-EAN 128 bar code) which is required for RTCIS and SAP-WM.

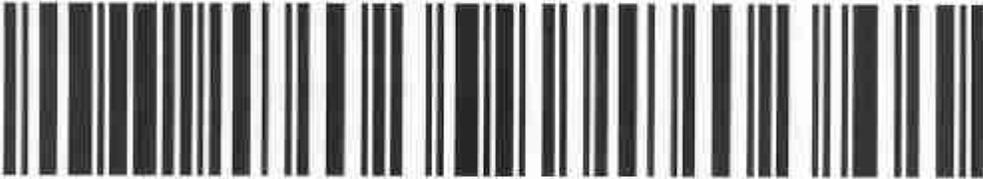
Bottom Section: This section contains only the SSCC(Serial Shipping Container Code) of the pallet. This is the 18 digit number also called the "license plate" of the pallet because it uniquely identifies the pallet to which it is affixed.

SUPPLIER NAME SUPPLIER LOCATION	SUPPLIER PRODUCT #: XXXXXXXX MRMS: XXXXXXXXXX PROD. DATE: XX-XXXX-XX PALLET: XXXX				
ITEM: <h2 style="margin: 0;">DESCRIPTION</h2>					
CONTENT: SUPPLIER EAN NUMBER	EXP. DATE EXP. DATE				
IRMS/GCAS #: SPEC. #	QUANTITY: QUANTITY UOM.				
LOT #: LOT NUMBER	PALLET TYPE XXXX				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px dashed black; padding: 2px;"> SPEC. # BAR CODE (VAR. LENGHT) (MAX. 8) </td> <td style="width: 50%; padding: 2px;"> QUANTITY (VAR. LENGHT - MAX 11) </td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center;">(91) 67312312</td> <td style="text-align: center;">(37)12345678.12</td> </tr> </table>		SPEC. # BAR CODE (VAR. LENGHT) (MAX. 8)	QUANTITY (VAR. LENGHT - MAX 11)	(91) 67312312	(37)12345678.12
SPEC. # BAR CODE (VAR. LENGHT) (MAX. 8)	QUANTITY (VAR. LENGHT - MAX 11)				
(91) 67312312	(37)12345678.12				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px dashed black; padding: 2px;"> LOT NUMBER BAR CODE (VAR. LENGHT-MAX 14) (ALPHA-NUMERIC) </td> <td style="width: 50%; padding: 2px;"> PALLET TYPE (VAR. LENGHT-MAX. 4) (ALPHA-NUMERIC) </td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center;">(10) AAAA123BBB23ZZ</td> <td style="text-align: center;">(90)P6</td> </tr> </table>		LOT NUMBER BAR CODE (VAR. LENGHT-MAX 14) (ALPHA-NUMERIC)	PALLET TYPE (VAR. LENGHT-MAX. 4) (ALPHA-NUMERIC)	(10) AAAA123BBB23ZZ	(90)P6
LOT NUMBER BAR CODE (VAR. LENGHT-MAX 14) (ALPHA-NUMERIC)	PALLET TYPE (VAR. LENGHT-MAX. 4) (ALPHA-NUMERIC)				
(10) AAAA123BBB23ZZ	(90)P6				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px dashed black; padding: 2px;"> EAN BAR CODE (FIXED LENGTH - 14) (NUMERIC ONLY) </td> <td style="width: 50%; padding: 2px;"> EXP. DATE (FIXED LENGHT - 6) (ALPHA-NUMERIC) </td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center;">(02)08410108000123</td> <td style="text-align: center;">(17)020205</td> </tr> </table>		EAN BAR CODE (FIXED LENGTH - 14) (NUMERIC ONLY)	EXP. DATE (FIXED LENGHT - 6) (ALPHA-NUMERIC)	(02)08410108000123	(17)020205
EAN BAR CODE (FIXED LENGTH - 14) (NUMERIC ONLY)	EXP. DATE (FIXED LENGHT - 6) (ALPHA-NUMERIC)				
(02)08410108000123	(17)020205				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px dashed black; padding: 2px;"> SSCC-18 BAR CODE (FIXED LENGHT - 18) (NUMERIC ONLY) </td> <td style="width: 50%;"></td> </tr> <tr> <td style="border-right: 1px dashed black; text-align: center;">(00) 10037000</td> <td style="text-align: center;">400118485 4</td> </tr> </table>		SSCC-18 BAR CODE (FIXED LENGHT - 18) (NUMERIC ONLY)		(00) 10037000	400118485 4
SSCC-18 BAR CODE (FIXED LENGHT - 18) (NUMERIC ONLY)					
(00) 10037000	400118485 4				

The following label sample shows a label when the supplier EAN Product Number and Expiration Date is also provided as information on the label. Note that a 4th bar code has been added to the label to allow for this add itional data.



SECTION 1	BAR CODE SPECIFICATION	Page 4 of 4
DATE: 8/2002	TITLE: LABEL FORMAT	ISSUE: REV. 2

TREDEGAR NEW BERN, NC		SUPPLIER PRODUCT #: 80614-01 MRMS: PROD. DATE: 03-16-01 PALLET: 0174997	
ITEM: TRILAMINATE EAR			
CONTENTS: 08410108000123		EXP. DATE: 020205	
IRMS/GCAS #: 12345678	QUANTITY: 12345678 M2.		
LOT #: VEND1234567890		PALLET TYPE P6	
 (91) 12345678(37)12345678			
 (10) VEND1234567890(90)P6			
 (02) 08410108000123(17)020205			
 (00) 1 0037000 400118485 4			



SECTION 2	BAR CODE SPECIFICATION	Page 1 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

The objective of this section is to provide the structural requirements for the material bar code pallet labels. A label is deemed acceptable as long as it falls within the guidelines allowed by this requirement. A plant should not request a change to the label as long as the sample provided meets the range of the parameters specified.

Human Readable Section (Top Section):

General:

The human readable portion of the label is divided into segments.

1. The human readable print for Item, and all bar coded data elements should be at least 3/8" (10mm) in height. It is recommended to use all capital letters.
2. The titles for each data element printed in human readable format such as Item, content, expiration date, IRMS/GCAS#, etc. should be at least 1/8" (3mm) in height. It is also recommended to use all capital letters for this.

Specific Data Elements:

Specific data content requirements for the top portion of the label are outlined below:



1. SUPPLIER IDENTIFICATION: The first segment first segment of data is the supplier name along with the supplier location. Location is generally the city followed by the state or country name.
2. PRODUCTION DATA: The second section is reserved for supplier production data. The data for MRMS #, Production Date #, and Pallet/Box/Jumbo # are required for European plant start-up and will be required until notified to stop.



SECTION 2	BAR CODE SPECIFICATION	Page 2 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

3. ITEM: This is the description of the material being provided on the pallet load. The correct description will be provided by P&G to the supplier prior to making shipments.
4. CONTENTS: Optional depending on the preference of the supplier. This would be its EAN Product Code for the item. The data field is 14 characters and is fixed in length.
5. EXPIRATION DATE: Optional depending on the requirements of P&G. This is a 6 digit numerical only field that identifies the date after which the material should no longer be used. The convention for this date is as follows: YYMMDD where YY are the last 2 digits of the year, MM is the month, and DD is the day.
6. IRMS/GCAS #: The IRMS/GCAS # (Individual Raw Material Specification (IRMS), also called the GCAS or PCEM Code) will be issued by Procter & Gamble. Although normally 8 characters in length, this field is considered alpha/ numeric and variable in length.
7. QUANTITY: Quantity is the number of individuals/pallet (meters, kilograms, etc.) as referred to when paying the bill. The only known exception to this is baled Kraft which should be expressed in number of bales in a shipment (See Section 4 Placement Standards for more explanation).

If a whole number is used the quantity can be a maximum of 8 characters (not including the data identifier). If decimal places are used quantity can be a maximum of 11 characters (not including the data identifier). With a decimal point, the format is XXXXXXXX.XXX, with up to 7 numeric characters being to the left of the decimal point and up to three numeric characters being to the right of the decimal point. Leading zeros should not be used to fill the data field.

The application identifier used will Application Identifier (37).

The human readable quantity information must include the units of measure being used. The units of measure is not included in the bar coded information.

8. LOT NUMBER: The Lot # is determined by the supplier. Lots must be homogenous as possible. Any process start/stop or raw material change by the supplier should be a new lot number. We prefer truck lots and lot numbers that don't include multiple truck loads. Pallets should also contain materials from a single lot and multiple lot pallets should be avoided. This may vary by supplier due to your process. Lot numbers must be unique. No lot number may contain two different material code numbers.

Lot numbers can be a maximum of 14 characters; this does not include the data identifier or the start/stop characters. The first 4 characters will be assigned by Procter & Gamble through your site bar code contact. This is known as the VENDOR ID. The remaining ten characters are supplier determined. The first and last of these remaining 10 characters must consist only of letters and numbers, (no spaces, hyphens, periods, etc.). Punctuation marks (commas, hyphens, periods) and other characters can be placed in positions 6 through 13.

9. PALLET TYPE: This is specified by P&G and is a 4 character alpha/numeric variable field. The possible options are:



SECTION 2	BAR CODE SPECIFICATION	Page 3 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

NONE
CHEP
GMA

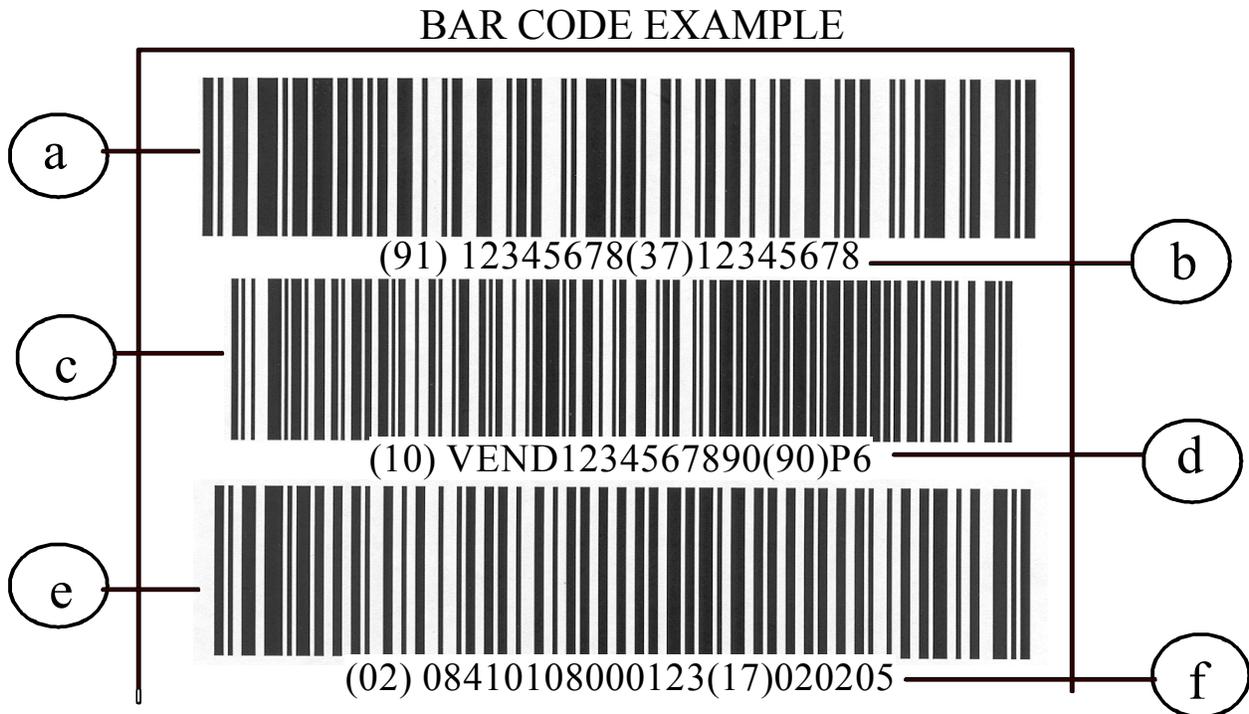
If pallet type is not specified by the P&G site default to NONE.
Please note these pallet types should be encoded using capital letters.

Other Considerations:

1. Purchase Order does not need to appear on the bar code label provided it is on the bill or lading or shipping documentation. At no time should the same material code number be shipped under more than one purchase order on the same shipment.
2. Additional human readable elements may be added if needed for supplier's internal tracking systems (i.e. a supplier product #) or to cover unique product needs. This information should be incorporated into the label format using EAN.UCC standards.

Bar Code Section (Middle Section):

The following shows an example of the concatenated bar code information. Because concatenated bar codes are being used with application identifiers, the information can be in any order.



- a. Concatenated bar code for IRMS/GCAS# and QUANTITY
- b. Human readable showing the IRMS/GCAS # and Quantity and the application identifier for each
- c. Concatenated bar code for LOT NUMBER and PALLET TYPE



SECTION 2	BAR CODE SPECIFICATION	Page 4 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

- d. Human readable showing the LOT NUMBER and PALLET TYPE and the application identifier for each
- e. Concatenated bar code for SUPPLIER EAN NUMBER (Optional at the preference of supplier) and EXPIRATION DATE (Optional depending on whether it is required for the material – P&G to specify)
- f. Human readable showing the ITEM and EXPIRATION DATE and the application identifier for each.

General Requirements:

1. Bar coded information shall use USS-128 symbology. Printing tolerances will follow USS-128(Uniform Symbol Specifications) standards. All alpha bar coded data shall utilize capital letters.
2. All bar codes must have a minimum printing height of 3/4" (19mm). Larger (i.e. 1"(25mm) to 1-1/2"(38mm)) are easier to scan and should be produced if possible.
3. Each bar code must include start/stop characters. These additional characters are not to be printed in the human-readable (non-bar coded) sequence. These characters are identified and not transmitted by the bar code reader.
4. Each bar code should have minimum leading and trailing zones of 0.40"(10mm). Note: quiet zones of 0.50"(13mm) is desirable for long range scanning.
5. All the UCC/EAN-128 bar codes should be printed with a narrow bar width between 25 mils(0.6mm) and 40 mils(1mm). Widths closer to the upper end of this range will print a better quality bar code.
6. None of the bar codes can exceed 6.5"(165mm) in length.
7. The following data fields will be bar coded: Contents(Optional depending on supplier preference), Expiration Date (Optional depending on P&G requirements), IRMS/GCAS #, Quantity, Lot Number, and License Plate Number (SSCC).

The bar coded data on the P&G label will use application identifiers to identify each segment of data. The following table describes the application identifiers, data segment and its fields size.

APPLICATION IDENTIFIERS TABLE

AI	Data Title	Data Description
(00)	SSCC	Pallet Load Id. (18 characters – numeric, fixed)
(02)	Supplier EAN Number	Optional Supplier EAN Number provided by the supplier (14 characters- numeric, fixed)
(10)	Lot Number	Vendor Code (4 characters - alpha/numeric) followed by supplier assigned lot number (10 characters - alpha/numeric, variable) (Total of 14 characters - alpha/numeric, variable)
(17)	Expiration Date	Optional Expiration Date depending on requirements of the product. If required, will be specified by P&G. (6 characters - numeric, fixed)
(37)	Quantity (Used with whole and decimal point number quantities)	Provided by supplier (numeric characters). Maximum of 11 characters including a decimal point. 8 digits can be to the left of the decimal point and 3 digits can be to the right of the decimal point. (11 characters – numeric, variable decimal point allowed)



SECTION 2	BAR CODE SPECIFICATION	Page 5 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

(90)	Pallet Type	Possible types designated by P&G (4 characters - alpha/numeric, variable)
(91)	IRMS/GCAS Number	Assigned by P&G (8 characters – alpha/numeric, variable)

Additional bar coded information can be provided on labels. The data identifiers to be used for this data must be provided to P&G in advance of shipping the materials to P&G. The data identifiers must be EAN.UCC standard identifiers.

8. Bar codes are to be concatenated to reduce the space required for printing the bar codes.
9. All bar codes shall start with a start code followed by the Function Code 1 character. For concatenated bar codes, if the data field proceeding the next data field is variable in length, the application identifier must be proceeded by the Function Code 1 character to act as a field separator.
10. The order of bar coded data is not important and is not specified because of the use of data identifiers and the Function Code 1 separator characters.

Human Readable Under Bar Codes:

1. The English description of the bar coded information must be a minimum of 1/8”(3 mm) in height. The placement of the human readable portion is directly below the bar code. Human readable characters shall not infringe on the bar codes.
2. Application identifiers should be placed in () to make them easily identifiable. Note: the () are not bar coded.
3. Start characters, stop characters, change mode characters and function code 1 characters are not printed in human readable format.

UCC/EAN-128 Bar Code - SSCC (Bottom Section):

This bar code will allow the plant to track every unit or pallet load received via a unique identification affixed to each load. The bar code serves as a license plate. The specifications for this bar code are written in accordance with the EAN.UCC 128 Material Label Standard established by the Uniform Code Council and EAN Organizations.

Each supplier must have a unique COMPANY PREFIX issued by the Uniform Code Council or EAN International. It is the responsibility of the supplier to obtain this number.

The Uniform Code Council, Inc. address is
 8163 Old Yankee Road, Suite J
 Dayton, OH 45458,
 Phone number: 937-435-3870).

In Europe please refer to:
 EAN International
 145 Rue Royale, B-1000



SECTION 2	BAR CODE SPECIFICATION	Page 6 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

Brussels, Belgium
Phone 0032 2 2271020

In other countries, contact your local EAN office.

Each bar code Shipping Unit Serial Number (SSCC) must be unique for a one year period. Each label will have a 20 character identification printed on it. Below is a sample. The data in the bar code printed in human readable form should be grouped or spaced to enhance readability. The grouping done by the data elements is the best way to prevent confusion:



The following is a description of the data in the bar code. The data in positions 3-22 will be printed in human readable form below the printed bar code.

- | | |
|----------|---|
| Position | |
| 1-2 | Start Code/FNC1 (Not shown, not in human readable form) |
| 3-4 | EAN.UCC 128 Application Identifier - "00" for this application.
Note: the human readable must have "()" around the "00" |
| 5 | Effective January of 2001, this will be called the "extension digit". The Extension digit has no defined logic and is available to the member company to increase the capacity of the serial number. As an extension digit, this number can be anything from 0-9 depending on the preference of the supplier. |
| 6-12 | EAN.UCC Company Prefix - "0037000" for this example. Note: The Company Prefix assigned by the UCC or EAN can be from 5 to 10 digits in length. At least 7 digit places should be used for the Company Prefix. If the Company Prefix. is less than 7 digits in length, the leading digit places should be filled "0"s. |



SECTION 2	BAR CODE SPECIFICATION	Page 7 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

- 13-21 Shipping Unit Serial Number - Starts with "000000001", "000000002", etc. Note: Longer Company Prefixes.(those which are 8-10 digits long) may require the number of digits used for the shipping unit serial number to be less.
- 22 Modulo 10 Check Character - Data in positions 3-21 are used for this calculation. The algorithm for the Modulo 10 Check Character is included in Attachment A.
- 23 Modulo 103 Check Character (Not shown, not in human readable form). Data in positions 1-22 are used for this calculation. The algorithm for the modulo 103 Check Character is in Section 7 Attachment A. Note: the Modulo 10 Check Character must be calculated before the Modulo 103 Check Character.
- 24 Stop Code (Not shown, not in human readable form).

The data in the bar code printed in human readable form should be grouped or spaced to enhance readability. The grouping done by the data elements is the best way to prevent confusion.

Human Readable Under UCC/EAN-128 Bar Code

1. The English description of the bar coded information must be a minimum of 3/8”(10mm) in height. The placement of the human readable portion is directly below the bar code. Human readable characters shall not infringe on the bar codes.
2. The application identifier should be placed in () to make them easily identifiable. Note: the () are not bar coded.
3. Start characters, stop characters, change mode characters and function code 1 characters are not printed in human readable format.

Ink or Print Color:

1. Black printing on a white background.
2. Should not smear or be defaced during the normal shipping and handling process to the extent it is no longer readable. If there are any concerns, the Sutherland rub test (10 strokes dry) will be used to determine if the label is acceptable.

Print Quality:

1. Thermal transfer, laser, or equivalent quality. Use of dot matrix printers is discouraged due to their ability to maintain a consistent long term print darkness.
2. Must be read within a 6 foot(1.8 meters) range with Symbol or other equivalent technology's hand held scanner at a 98% first read rate. First read rate is defined for a laser scanner as "during the period of the first trigger pull".
3. Bar codes must achieve a grade of A or B according to ANSI specifications.(X3.182-1990) (American National Standards Institute, 11 West 42nd Street, New York, NY 10036) or ISO/IEC 15426-1 standards.

Operating Temperatures and shelf life:



SECTION 2	BAR CODE SPECIFICATION	Page 8 of 8
DATE: 3/2005	TITLE: LABEL STRUCTURE	ISSUE: REV. 4

1. Labels must be placed on a flat surface. Wrinkled pallet labels are not readable, and therefore not acceptable.
2. Label must maintain adherence to surface and print quality at temperatures of -40 degrees F (-40 degrees C) to 140 degrees F (60 degrees C). Note: A full adhesive label is not required. Labels can be securely taped on the unit load provided the tape does not interfere with the scannability.
3. Label must withstand humidity, water, and age (no yellowing).



SECTION 3	BAR CODE SPECIFICATION	Page 1 of 5
DATE: 8/2002	TITLE: QUALIFICATION AND VERIFICATION	ISSUE: REV. 2

In order to insure we have high quality bar code pallet labels that will consistently deliver first read scans, each the bar codes from each supply location will need to be qualified and verified. This will be done in two steps. The first step is qualification. Qualification needs to be achieved prior to the pallet labels being utilized on the inbound materials. A label will be qualified if it has no more than 1 deviation from the standard.

Once qualified the supplier must proceed through a verification process (a minimum of 6 months). The length of the verification period will depend on the volume of receipts. Higher volume materials may be verified more quickly than small volume materials. During this period, pallet labels will be randomly selected from inbound receipts for analysis. In addition to the ANSI reading and quality grade, a placement grade will also be used during this verification period.

Placement Grades:

- A= Meets all placement specifications.
- B= Only one deviation from specifications
- C= Two or three deviation from specifications
- D= Four or five deviation from specifications
- E= Label is in poor condition (i.e.-Torn, Wrinkles), placement is on bottom corner or non-existent.

To be verified a supplier must have no more than one deviation from the standard and maintain an A/B Placement Grade during the verification period. Once verified the pallet labels will not need to be tested on a monthly basis.

Suppliers are accountable for the quality and the scannability of the bar code at the point of receipt at the P&G plant (Please refer to the Principles of Accountability in Attachment G in the Appendix). Appropriate quality control processes should be put in place to achieve and maintain the verified status. We strongly encourage suppliers to purchase a bar code verifier to be able to do the appropriate internal bar code testing (Attachment F in the Appendix provides recommended capabilities and suppliers of verifiers.) If a P&G site begins to experience on-going problems with a supplier's label at any point after they have been verified, the supplier will be requested to correct the problems and will need to be requalified and reverified.

Suppliers that ship to multiple plants will be formally qualified by only one site. The qualified label should then be used on shipments to all sites. As subsequent sites begin requiring labels they may also ask for a sample label for testing. If they do not feel it meets the qualification criteria, that site will work with the site that did the initial qualification to determine if there is an issue that exists that will require changes by the supplier and requalification.

The following is an example of the worksheet the plant sites will utilize for the qualification process.



SECTION 3	BAR CODE SPECIFICATION	Page 2 of 5
DATE: 8/2002	TITLE: QUALIFICATION AND VERIFICATION	ISSUE: REV. 2

Bar Code Qualification Worksheet

Verifier: _____ Date: _____

Supplier: _____

Product: _____

Equipment Used: _____ Qualified: YES NO

UCC/EAN 128# on Label: _____ Date Rec'd: _____

GRADING:

Bar Code (line 1) Data String: _____
 ANSI or ISO/IEC 15426-1 (Symbol) Grade: A B C D F

Bar Code (line 2) Data String: _____
 ANSI or ISO/IEC 15426-1 (Symbol) Grade: A B C D F

Bar Code (line 3) If needed??
 Data String: _____
 ANSI or ISO/IEC 15426-1 (Symbol) Grade: A B C D F

Code UCC/EAN 128
 SSCC-18
 ANSI or ISO/IEC 15426-1 (Symbol) Grade: A B C D F

HUMAN READABLE ELEMENTS

Segment 1: Supplier Name Identified? _____ Y N
 Location Identified? _____ Y N

Segment 3: Proper Item Description
 _____ Y N
 Height _____ min 3/8" (10mm)? Y N

Segment 4: Contents (Optional) correct? _____ Y N
 Height _____ min 3/8" (10mm)? Y N

Segment 5: Expiration Date (if required) _____ Y N
 Height _____ min 3/8" (10mm)? Y N

Segment 6: IRMS/GCAS # correct _____ Y N
 Height _____ min 3/8" (10mm)? Y N

Segment 7: Quantity _____ Y N
 Proper Unit of Measurement in metrics? Y N
 Height _____ min 3/8" (10mm)? Y N

Segment 8: Lot # _____ Y N
 Proper Vendor ID? Y N

Segment 9: Height _____ min 3/8" (10mm)? Y N
 Pallet Type correct? _____ Y N
 Height _____ min 3/8" (10mm)? Y N

BAR CODE



SECTION 3	BAR CODE SPECIFICATION	Page 3 of 5
DATE: 8/2002	TITLE: QUALIFICATION AND VERIFICATION	ISSUE: REV. 2

line 1:	Height _____	min 3/4"(19mm)?	Y	N
	Width _____	max 6.5"(165mm)?	Y	N
	QZoneF _____	min 0.40"(10mm)?	Y	N
	QZoneB _____	min 0.40"(10mm)?	Y	N
	Narrow Bar Width _____	25-40mils (0.6-1mm)?	Y	N
	Encode Correct? _____		Y	N
line 2:	Height _____	min 3/4"(19mm)?	Y	N
	Width _____	max 6.5"(165mm)?	Y	N
	QZoneF _____	min 0.40"(10mm)?	Y	N
	QZoneB _____	min 0.40"(10mm)?	Y	N
	Encode Correct? _____		Y	N
	Narrow Bar Width _____	25-40mils (0.6-1mm)?	Y	N
line 3:	Height _____	min 3/4"(19mm)?	Y	N
	Width _____	max 6.5"(165mm)?	Y	N
	QZoneF _____	min 0.40"(10mm)?	Y	N
	QZoneB _____	min 0.40"(10mm)?	Y	N
	Encode Correct? _____		Y	N
	Narrow Bar Width _____	25-40mils (0.6-1mm)?	Y	N
Line 4:	Height _____	min 3/4"(19mm)?	Y	N
	Width _____	max 6.5"(165mm)?	Y	N
	QZoneF _____	min 0.40"(10mm)?	Y	N
	QZoneB _____	min 0.40"(10mm)?	Y	N
	Encode Correct? _____		Y	N
	Narrow Bar Width _____	25-40mils((0.6-1mm)?	Y	N
PRINT QUALITY				
	Voids?		P	F
	Burnt out elements?		P	F
	Smudging/Peeling?		P	F

The following is an example of the worksheet the plant sites will utilize for the verification process.

Inbound Materials
Bar Code Verification Worksheet



SECTION 3	BAR CODE SPECIFICATION	Page 4 of 5
DATE: 8/2002	TITLE: QUALIFICATION AND VERIFICATION	ISSUE: REV. 2

Verifier Name: _____

Date: _____

Supplier: _____

Product: _____

Equipment Used: _____

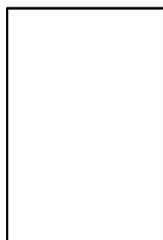
Grade: A B C D F

Material Unit Type: Round Square Bag

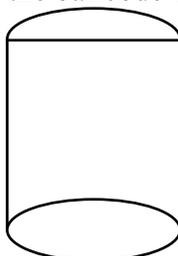
Date Rec'd: _____

1. Does each unit load have a bar code? Y N NA

2. Place an "X" on the location(s) of the bar code for the unit.



Square



Round



Bag

3. Is the label placed in the upper half of the unit? Y N NA

Are the bar codes clear of any banding, header, or other obstructions? Y N NA

4. Is the bar code placed on the outside of the stretch wrap? Y N NA

5. Are there any wrinkles in the bar code that impact scannability? Y N NA

6. Is there any other damage to the label that may impact scannability? Y N NA

If yes, are there - Smudges? Y N

Tears? Y N

Other? _____

7. Is the same UCC/EAN 128 SSCC identification on number on all labels on the unit? If no, please explain. Y N

8. Does each unit represent only one lot number? Y N



SECTION 3	BAR CODE SPECIFICATION	Page 5 of 5
DATE: 8/2002	TITLE: QUALIFICATION AND VERIFICATION	ISSUE: REV. 2

If no, please explain.

9. Is the IRMS/GCAS # correct? Y N
- ** For Round Units Only ****
- Are there 3 bar codes on each unit? Y N NA
 (5 gallon buckets only require 1 label.)
 (Drums require only 1 label per drum, drums with different Lot # can be placed on the same pallet)
- ** For Square Units Only ****
- Is there a label on all 4 sides? Y N NA
- ** For Baled Pulp ****
- Are the bar codes available from the unloading door of the railcar? Y N NA
- If there was a truck shipment, were bar codes available from the rear of the trailer? Y N NA
- ** For Bags ****
- Are the bar codes placed in a clear plastic envelope outside bag? Y N
- Are bar codes in the 2 opposite sides of the bag? Y N

Grading

1. Tally up the number of outages = _____
2. Assign a grade based on the scale below and circle the letter grade at the top of the first page.

Grading Scale

# Deviations	Grade
0	A
1	B
2-3	C
4-5	D
6+	F

* A grade of A or B must be earned to pass the verification**



SECTION 4	BAR CODE SPECIFICATION	Page 1 of 2
DATE: 8/2002	TITLE: LABEL PLACEMENT	ISSUE: REV. 2

The objective of this section is to present the label placement standard. A placement grade (A to E described in section 3, page 1) will be provided from a visual observation of the units on site versus the placement standard.

Placement of bar code labels is critical for effective/ efficient handling and accounting of the materials received and used on site. There are three basic shapes of material units which are handled.

- A. Round
- B. Square
- C. Bag

It is critical for all material unit types to meet the following criteria.

- A. Each unit load or bundle will need to have bar code labels.
- B. All labels must be placed on units clear of banding or other obstructions and be free from wrinkles.
- C. Stretch wrapped material labels must be placed on the outside of the stretch wrap with a solid surface behind the label. To avoid wrinkles in label should not be placed on stretchwrapping spanning a void.
- D. Non stretch wrapped material labels must be securely attached and be free from any wrinkles.
- E. All bar code labels must be placed in the upper half of the unit load on a solid surface. Our preference is to have the label as close to the top of the unit as possible. A guideline to use is 3”(80mm).
- F. Single lot numbers are required per unit. Generally the only exception to this is for drums which will require 1 label per drum. Drums of different lot numbers can be placed on the same unit. Another option is units with multiple lot numbers must have only one set (2-4 depending on shape of material) of code labels. These labels must have one common UCC/EAN 128 SSCC number, IRMS/GCAS #, a master lot #, and quantity for the entire unit.

Use of the master lot numbers should be reviewed with the receiving site to insure there are no concerns on lot tracking for regulated brands.

I. Round Units Or Bundles

- A. On all round units or bundles, should have three bar codes labels are to be placed every 120 degrees around unit.
- B. Some of the materials included in this section are:
 - 1. Fabric
 - 2. Tissue
 - 3. Dry lap
 - 4. Drum Glue, Perfumes, Oils, and Additives
 - 5. Poly
 - 6. Foam



SECTION 4	BAR CODE SPECIFICATION	Page 2 of 2
DATE: 8/2002	TITLE: LABEL PLACEMENT	ISSUE: REV. 2

- C. If a round unit is less than 15”(380mm) in diameter, one labels is acceptable to avoid overlap of the labels.
- D. Drums can be shipped with a single label on each drum. Suppliers lots can be mixed on a single unit load of drums. In this case, each drum would have its own UCC/EAN 128 number (SSCC). This procedure should be reviewed with the receiving site to insure there are no concerns on lot tracking for regulated brands.

II. Square Units

- A. The bar code label can best be scanned if positioned in the center of the unit, 3 inches (80mm) from the top. If center placement of the label results in the label spanning a void within the unit load, the label should be repositioned so it has a solid surface behind it. If three inches from the top is not obtainable, place the labels within the top third of the unit load (as close to the label as possible).
- B. A bar code label shall be placed on all four sides. Any deviations from this must be approved by the primary qualifying site.
- C. Some of the materials covered by this section are:
 - 1. Poly
 - 2. Box Glues
 - 3. Tapes
 - 4. Elastic
 - 5. Lycra
 - 6. Waistshield
 - 7. Polybags
 - 8. Corrugated Containers
 - 9. Miscellaneous items (sterile poly bags, leaflets, coupons, etc.).
 - 10. Totes - Glues, Inks, and Dyes
- D. Baled Kraft is a unique material and should be handled as follows:
 - 1. Baled Kraft will need to be bar coded on a shipment basis. Bar code labels do not need to be placed on the individual bales. Instead, four bar codes should be generated for each rail car.
 - 2. These bar codes should be placed in 2 manila envelopes (2 per envelope). The envelopes should be placed on each side of the rail car in a manner that will not damage the label during transit.
 - 3. For truck shipments, the number of bar codes can be reduced to 2 (in 1 envelope) that is placed in the rear of the trailer .

III. Bag Form

- A. Bar code labels should be placed in a clear plastic envelope on the outside of the bag.
- B. Bar code labels should be placed on two opposite sides with a solid surface behind the labels.



SECTION 5	BAR CODE MANUAL	Page 1 of 2
DATE: 8/2002	TITLE: ATTACHMENT A	ISSUE: REV. 2

UCC/EAN-128 BAR CODE ELEMENT DETAILS

Extension Digit

Effective January of 2001, Packaging Type will be replaced by Extension Digit. The extension digit has no defined logic and is available to member companies to increase the capacity of the Serial number. As an extension digit, this number can be anything from 0-9 depending on the preference of the supplier.

Suppliers who previously used a "1" or a "3" for packaging type can continue to use that number for the Extension Digit

Modulo 10 Calculation

1. Sum all the digits in the odd positions.
2. Multiply the sum by (3).
3. Sum all the digits in the even positions.
4. Add the sum of the even positions to three times the sum of the odd positions.
5. The check digit is the number which, when added to the overall sum, yields the next multiple of 10.

Modulo 103 Calculation

1. Sum the products of each character times its weighting factor.
2. Divide the sum by 103. The remainder is the check character

Weighting factor is determined by the following:

<u>Code 128 Character</u>	<u>Weight</u>
Start Character and FNC1	1
Data	2....n



SECTION 5	BAR CODE MANUAL	Page 2 of 2
DATE: 8/2002	TITLE: ATTACHMENT A	ISSUE: REV. 2

Character Values for Code 128 in Code C Format

<u>Value</u>	<u>Code C</u>	<u>Value</u>	<u>Code C</u>	<u>Value</u>	<u>Code C</u>
0	00	36	36	68	68
1	01	37	37	69	69
2	02	38	38	70	70
3	03	39	39	71	71
4	04	40	40	72	72
5	05	41	41	73	73
6	06	42	42	74	74
7	07	43	43	75	75
8	08	44	44	76	76
9	09	45	45	77	77
10	10	46	46	78	78
11	11	47	47	79	79
12	12	48	48	80	80
13	13	49	49	81	81
14	14	50	50	82	82
15	15	51	51	83	83
16	16	52	52	84	84
17	17	53	53	85	85
18	18	54	54	86	86
19	19	55	55	87	87
20	20	56	56	88	88
23	23	57	57	89	89
24	24	58	58	90	90
25	25	59	59	91	91
26	26	60	60	92	92
27	27	61	61	93	93
28	28	62	62	94	94
29	29	63	63	95	95
30	30	64	64	96	96
31	31	65	65	97	97
32	32	66	66	98	98
33	33	67	67	99	99
34	34			102	FNC 1
35	35			105	START (CODE C)



SECTION 5	BAR CODE MANUAL	Page 1 of 4
DATE: 3/2005	TITLE: ATTACHMENT B	ISSUE: REV. 3

FREQUENTLY ASKED QUESTIONS

The following are frequently asked questions concerning P&G labelling requirements:

Q. *If I want to qualify my label according to the new standard, how do I get that done?*

A. In North America, a third party company, Stratix does the label qualification. Please provide label samples for Stratix for qualification. The contact at Stratix is Caroline Cheves.

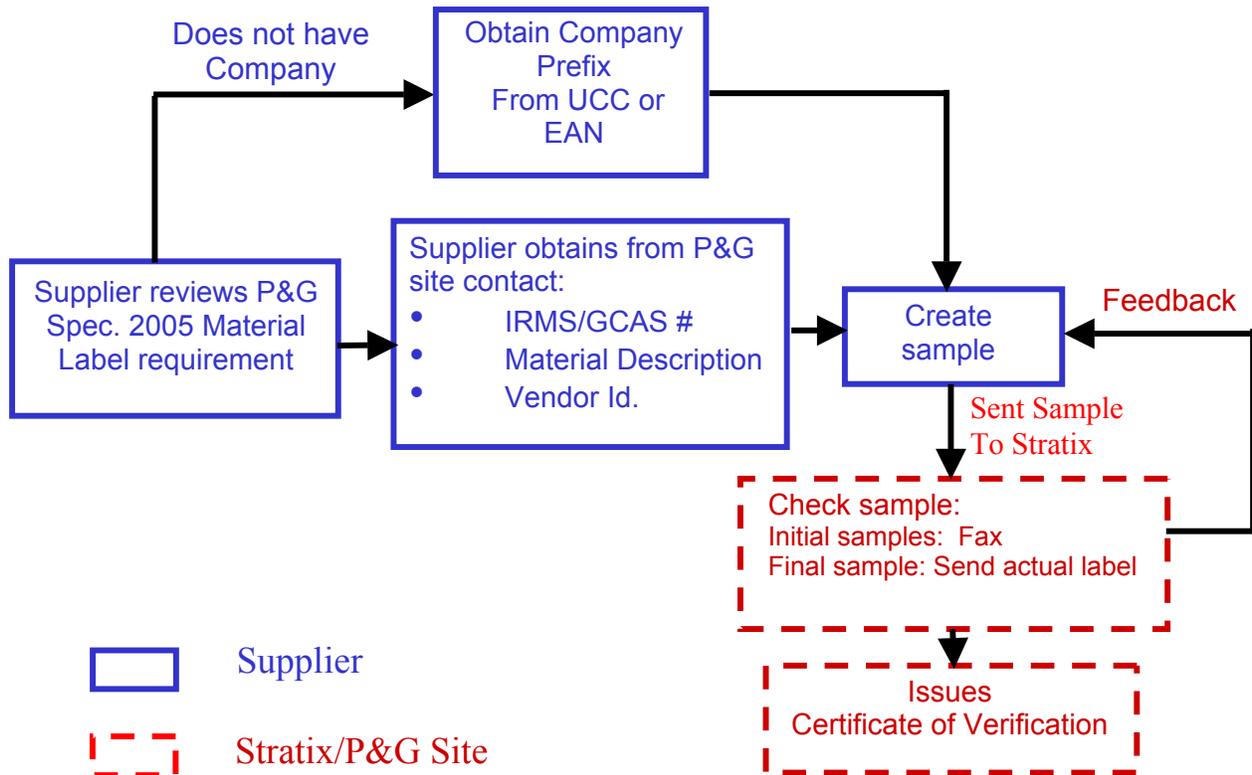
Her email is:

Ccheves@stratixcorp.com

Phone number: 770-582-4217

In Europe or other regions for the world, please contact the plant site you supply to determine the process that is followed.

The following is the process that will be followed for label qualification.



Technical questions can also be answered by Dale Hanson at Procter and Gamble.

His email address is:

Hanson.dp@pg.com

Phone number: 513-634-9765

Q. *I ship to other Sectors and Regions of P&G. Are they going to be requesting bar code labels too? If so, will there label specifications be the same?*

A. Yes, all P&G operations will use the same standard.



SECTION 5	BAR CODE MANUAL	Page 2 of 4
DATE: 3/2005	TITLE: ATTACHMENT B	ISSUE: REV. 3

Q. *How long does it take to get a EAN.UCC Company Prefix. and how much does it cost?*

- A. The normal time to get a Company Prefix from the Uniform Code Council is 4 weeks. Assigning the number will be expedited for a \$35 fee. Timing will then be 3-5 days.
- B. In Europe The EAN Company Prefix has to be requested to the EAN 's affiliate of the country where the Company is based (there is a EAN affiliate per each European Country, list of EAN affiliates can be asked to EAN international Organization). Time and fee to get a Company Prefix vary from country to country . As a general rule the costs are proportional to the company's gross sales.

The following are contact information for the UCC and EAN Council:

Uniform Code Council
8163 Old Yankee Road
Suite J
Dayton, Ohio 45458
phone: 937-435-3870.

In Europe the equivalent of UCC is:

EAN International Organization , 145, Rue Royale, B-1000 Brussels, Belgium. Phone : +3222271020,
email : info@ ean.be WWW:http://www.ean.be
Please contact them to receive relevant documentation.

Q.: *What is the length of a Compnay Prefix?*

- A.: Company Prefixes can range in length from 5 to 10 digits. Use at least 7 digits for the Company Prefix. As an example, if your Company Prefix. is only 5 digits long, add "00" to the front of it. If the Company Prefix is 10 digits long, shorten the serial number field to 6 digits.

Q.: *With longer Company Prefixes, will I run out of serial numbers in a time period shorter than 1 year?*

- A.: No, the UCC and the EAN should only be assigning 8 to 10 digit long Company Prefix to companies who are smaller and who do not have a volume large enough to cause them to run out of unique serial numbers in less than 1 year.

Q.: *How should I use the new Extension Digit, which replaced the Packaging type?*

- A.: The Extension digit can be assigned any number between 0 and 9. It can also be used to extend the field length of the serial number. It may be advisable at this point to leave it as an unassigned digit at this point. The supplier should communicate with their plant contact on how they intend to use the Extension Digit.

Q. *How do I calculate the Modulo 10 and Modulo 103 characters? The instructions in the manual are not clear.*

- A. The method for calculating the Modulo 10 check character is shown in an example in Appendix B, page 62 of the "Application Standard for Shipping Container Codes". If you do not have this standard, a copy can be obtained from the Uniform Code Council:

The Modulo 103 check character is a standard feature of the UCC/EAN 128 symbology. The formula is given on page 700 of the label specification. The value for each set of numbers is also given in the table on this page. If additional reference material is needed. page 5 of the "USS-128, Uniform Symbology Specification". An example is worked on this page including figures representing the bar code. If you do not have this standard and would like a copy, it can be obtained from Automatic Identification Manufacturers(AIM), phone: 412-963-8588.

Q. *Where do we get the 4 alpha character code that is part of the Vendor Lot Number?*

- A. This code is assigned by P&G and will be the same for all P&G locations that you supply. If you do not have this code, contact your P&G buyer or plant contact.



SECTION 5	BAR CODE MANUAL	Page 3 of 4
DATE: 3/2005	TITLE: ATTACHMENT B	ISSUE: REV. 3

Q. *Putting the label on the outside of the stretch wrap is going to subject the label to lots of wear and tear. Wouldn't it be better to put it on the inside of the stretch wrap?*

A. Two or three layers of stretch wrap will still allow scanning of the bar codes to occur if there are no wrinkles in the stretch wrap. However, this will still decrease the scanning distance of the bar code by at least 12"(30mm). Wrinkles of multi layers of stretch wrap will make the bar codes unscannable. Since scanning distance is critical, we prefer labels not be put under the stretchwrap.

Q. *I only put two labels on my square units now.. Why did you increase the requirement to 4?*

Answer: It is necessary that our operators in the warehouse be able to scan the rolls and unit loads from any direction. Additionally, if a label get damaged in transit, the data can still be scanned from one of the remaining in tact labels

Q. *Are there any specific size requirements for the overall label size? Minimum size? Maximum size?*

A. All human readable information and bar codes must be printed within the specifications. This will set the minimum size label. No bar code can exceed 6.5"(165mm). This is due to a limitation of the handheld scanners used in the warehouse. Human readable information can exceed the 6.5"(165mm). There is no maximum label size.

Q. *The Purchase Order is not available to me when I produce and apply my label. Is it really a requirement?*

A. The Purchase Order Number must at least be on the bill of lading. We realize putting the purchase order on each label may not provide an efficient operation at the supplier, so it is not required.

Q. *Where do I get the shipping unit serial number that is within the UCC/EAN 128 (SSCC) We track pallet numbers within our inventory management system, can I use that number?*

A. The shipping unit serial number is assigned by you. Its length depends on the length of the manufacturer's id. If the Company Prefix is 7 digits long, the serial number will generally be 9 digits long. If the Company Prefix is 9 digits long, then the serial number will be 7digits long. You can use your normal pallet number. The serial number should not repeat more frequently than once every year and preferably not more frequently than once every 3 1 years. If you have multiple production locations that ship to P&G, you will need to set up a process to insure the sites do not duplicate each other's unit serial numbers. It is not necessary to put information such as "1 of 14" etc. on the label in human readable form.

Q. *How does this affect the C.O.A.(Certificate of Analysis) we are now providing*

A. The C.O.A. must include the same information as usual, including the GCAS#.PO#, Unit amount, Quantity, the Controlling Lot #, and Shipment #. Please contact the quality control team contact at P&G if you have further questions.

Q. *Can I use my current dot matrix printer if I have a work process in place to insure that the ribbons are changed frequently?*

A. Dot matrix printers are not prohibited, but are also not recommended because there is frequently a problem with low contrast print because the ribbon needs to be changed. Printers such as laser printers and thermal transfer printers require less maintenance to produce good print contrast. Dot matrix printers also produce print which does not have a sharp edge compared to laser or thermal transfer printers. This will also result in a lower quality bar codes.

Q. *I have multiple plant sites that ship to P&G. How do I insure their UCC/EAN 128 bar codes are unique? Do I need to get separate UCC (EAN) Compnay Prefix?*

A. One Company Prefix is okay even when multiple sites are involved. If you have multiple sites, assign the first 1 or 2 places in the serial number to a site. All serial numbers from that site should then begin with that assigned code.



SECTION 5	BAR CODE MANUAL	Page 4 of 4
DATE: 3/2005	TITLE: ATTACHMENT B	ISSUE: REV. 3

Q. *What is the difference between the Code 128 symbology and the UCC/EAN 128 symbology?*

A. The 128 symbology is the basic encoding of data using the series of bars and spaces called for in the specification. The UCC/EAN 128 standard is an application standard. It uses the 128 symbology. The application calls for the "Function Code 1" to be encoded immediately after the start character. The standard then uses a data identifier to identify the type of data being encoded. The UCC/EAN 128 application also calls for the calculation of the modulo 10 check character to be done just before the modulo 103 check character.

Q. *What is the difference between the Serial Number and the Lot Number?*

A. The Serial Number is a single unit ID. If you have 20 units per load, each unit must have its own Serial Number. The Lot Number represents all the unit numbers in that production run. This maintains raw material traceability.

Q. *What is the purpose of the "Function Code 1" character?*

A. The "Function Code 1" character used immediately after the start character indicates a UCC EAN application standard is being used.

Q. *What is the purpose of the modulo 10 check character?*

A. It is used as a check to ensure the data in the bar code is entered correctly when key punched into the terminal. Key punching the data would be done when the bar code itself is not scannable.

Q. *Is there an advantage to printing the UCC EAN -128 bar code in 40 mil (1mm or 100% magnification factor) narrow bar width vs. 25 mils (0.6mm or 60% magnification factor)?*

A. The larger bar code will scan from further distances and will allow for more tolerance in printing.

Q. *Is there a difference when printing code 3 of 9 when an aspect ratio of 3:1 is used vs. 2.3:1.*

A. The 3:1 ratio allows for more printing tolerance and will give better scanning results.

Q. *Why do human readable characters need to be at least 3/8"(10mm) high?*

A. Our operators in the warehouse will be trying to read them from 6-8 feet(1.8-2.4 meters) away in a dimly lit warehouse. If space allows it is helpful if they can be made larger.

Q. *What type of label stock should be used?*

A. White label stock should be used. Contact your local supplier of printer and materials to find out the options which are possible. Standard copier paper is acceptable. Adhesive backed is not required. The labels must be attached to the pallet loads of material so they don't fall off. They can be taped to the pallet load. Clear tape can be used. Try not to put the tape over the top of bar codes which must be scanned. The tape may affect the scanning.

Q. *Should a supplier own a bar code verifier?*

A. Owning a verifier is not required. However, given the supplier's accountability for the bar codes scannability we believe it would be a wise choice.

P&G will use a verifier to check bar code quality and will identify short comings in bar code quality. This does not replace your own capability to ensure labels are produced in the proper format, are clear, sharp and exhibit good scanning characteristics. P&G will also be scanning every label. Your printing process and inspection process must ensure that your label quality is robust and does not vary over time or allow a significant number of bad quality labels to be sent to P&G. We strongly encourage the suppliers to use a bar code verifier to do the appropriate internal testing required to meet this requirement. If the P&G sites you are supplying are requesting a certificate of analysis type data on bar codes, a verifier will become even more critical. (Attachment F provides recommended capabilities and suppliers of verifiers.)



SECTION 5	BAR CODE MANUAL	Page 1 of 3
DATE: 8/2002	TITLE: ATTACHMENT C	ISSUE: REV. 2

Label CQV

The supplier monitoring their own quality is the best way to ensure a quality label is printed and applied appropriately to pallet loads. Ask the supplier what their capability is to determine bar code quality. Also ask the supplier what their label application method is and how frequently this system is checked to ensure proper placement of labels.

Based on the supplier response, the plant can begin to determine their own testing program. For suppliers who do not have a system in place for monitoring quality, the plant should expect to provide more checking of label quality and placement. The plant should also be provide the purchasing department with information on this supplier's capability and identifying the importance of the supplier's needed improvement. The supplier's response should be a factor in determining who will be a long term supplier to P&G.

Commissioning:

The supplier submits a label which is suppose to meet the label standards. Initial samples can be faxed to make sure proper symbologies are being used, human readable print is of acceptable size, the right information is on the label, and label format is appropriate.

After initial acceptance, a actual label should be sent to the plant for final approval. The commissioning results could be improved by the supplier sending an initial label printed for plant final testing and the 50th label printed. The plant would grade both labels and note any differences in print quality or data acceptability. This would allow commissioning of the printing.

Initial shipment:

Commissioning of placement can not be done until actual receipts occur. The initial shipment will be the first opportunity for the plant to monitor proper placement of labels. These shipments should be checked closely to ensure the proper data is on the labels, the UCC/EAN-128 bar codes all match on a given pallet load, and the labels are positioned on the pallet load so they can be scanned by the receiver. A truck load received with all labels in proper position is considered passing this step.

Qualification:

The individual plant needs to identify the split of responsibility of fork truck drivers working on the floor and the person who has been trained to grade the quality of the label and its placement on pallet loads.



SECTION 5	BAR CODE MANUAL	Page 2 of 3
DATE: 8/2002	TITLE: ATTACHMENT C	ISSUE: REV. 2

Initial shipment:

Proper use of symbologies and print quality should be checked on the initial shipment to ensure the printing is done properly. Checking the first pallet load taken off the truck and the last load off the truck will give the best determination of the printing process being in control.

Later shipments:

After the initial shipment, proper placement of labels should continue to receive a high priority. Continue to check that the proper data is on the labels, the UCC/EAN-128 bar codes all match on a given pallet load, and the labels are positioned on the pallet load so they can be scanned by the receiver.

Proper use of symbologies and print quality will be of lesser priority. Once the label format has been established and if a robust printing technology is being used, few problems should be encountered.

Frequent problems with labels would be classified as a problem being identified on a shipment once in every 10 shipments. If this frequency or higher is present, continuous monitoring is required.

If frequency of problems occurs only once in every 100 truck loads with a supplier, the frequency of problems is considered to be low. Occasional extensive checking of the labelling on a truck load would be warranted. This frequency would be about 2-4 times per month.

Verification:

A supplier is assumed to be verified if they have had no label incidents in a 3 month period or 10 truck loads, whichever takes more time. A single incident is cause to lose verification status and return to qualification status. If an incident occurs and a special cause can be identified which caused the incident, the supplier can return to verification status in the period of 1 month or 5 truck loads, whichever is the longer period, if no further incidents occur.

Reporting format and standards:

The label quality and placement report format should be used for recording all label problems. It is also helpful for the plant to record the extra time the plant spends receiving the truck load because of the particular label problem involved. Each label incident should be reported to the purchasing department as well as the supplier. After 3 incidents, the plant and purchasing should discuss the alternatives for offsetting the additional work at the plant. This could include rejecting receipts with label problems, charging fines to recover the plant's additional expended time, or termination of the suppliers contract.

Special Cause Label Qualification:



SECTION 5	BAR CODE MANUAL	Page 3 of 3
DATE: 8/2002	TITLE: ATTACHMENT C	ISSUE: REV. 2

Any time a supplier changes software, printing hardware, or computer hardware is a reason to do a check of print quality, format, and data integrity even if the supplier is past the commissioning phase or is even fully qualified.



SECTION 5	BAR CODE MANUAL	Page 1 of 1
DATE 8/2002	TITLE: ATTACHMENT D	ISSUE: REV. 2

Bar Code Manual Change Procedures

Changes must be made to this standard from time to time to reflect changes in our methods and procedures. Every vendor and plant site is encouraged to suggest improvements and revisions.

Suggestions from the plant sites should be handled as follows:

- A. Revision suggestions for the Bar Code Manual should be submitted in writing to the site Bar Code Owner. The Bar Code Owner will work with the site System Owner to evaluate the suggestion and determine if the site should request the change to the Bar Code manual.
- B. If the site chooses to pursue the change, the site System Owner will propose the change to the Application Software Review Board.
- C. The Application Software Review Board will be responsible for determining if this change is aligned with the industry standards (via a review with P&G's Representatives to the Uniform Code Council and EAN International Organizations), if it impacts any other businesses, and if it requires a change to P&G's Bar Code Specification. The Review Board will keep the Bar Code Network advised of the status of the proposed change and will document if the change will be made.
- D. The Application Software review Board will then issue the Bar Code Manual with the change incorporated.

Suggestions from Vendors should be made to the site that is responsible for their label qualification. If that site agrees with the change they will continue with the procedure outlined above (B. thru D). Suggestions may also be made via their normal Purchasing contact. Purchasing should forward the change request to an appropriate receiving site or to the Application Software Review Board and request that it be reviewed.

Each vendor is expected to have a single point of contact for bar coding. All bar code manual revisions will be issued to this single point of contact. Any changes to the point of contact should be communicated via Purchasing.



SECTION 5	BAR CODE MANUAL	Page 1 of 1
DATE: 8/2002	TITLE: ATTACHMENT E	ISSUE: REV. 2

BAR CODE VERIFIERS - REFERENCE

Recommended Capabilities:

- ◆ Follow ANSI X.3182-1990 standard or ISO/IEC 15426-1 standard
- ◆ Verify UCC/EAN 128 bar code
- ◆ Verify bar codes which have a physical length of up to 9.86 inches (250mm)
- ◆ Verify bar codes which have a narrow bar width of 25-40 mils (0.6mm-1mm)
- ◆ Verify using the ANSI grading scale
- ◆ Provide an "A-F" grade for a verified bar code
- ◆ Provide the parameter which is causing a low ANSI grade
- ◆ Use a light pen or mouse vs a non contact scanner
- ◆ Have a laser aperture size of 20 mils (0.5mm)

Other Capabilities Which are Nice to Have:

- ◆ Battery and 120/240 volt line powered
- ◆ LCD display giving ANSI grades on screen
- ◆ Printer which gives ANSI grading information in hardcopy
- ◆ Printer which gives scan profile
- ◆ RS-232 output for dumping data to a data file
- ◆ Data base software for storing data
- ◆ Data analysis program for troubleshooting the cause of poor ANSI grade and suggesting printing changes



SECTION 5	BAR CODE MANUAL	Page 1 of 1
DATE: 8/2002	TITLE: ATTACHMENT F	ISSUE: REV. 2

RTCIS Bar Coding: Principles of Accountability

- Procter & Gamble **is** committed to the success of bar coding as a means of improving our inventory management processes.
- Supplier capability to successfully bar code their materials for receipt into a P&G facility is a pre-requisite of doing business with Procter & Gamble.
- Bar code scanability is a quality attribute and, like other quality attributes, can be measured, tracked, and reported. It's measure of success is binary -- either the bar code scans successfully, or it does not.
- Responsibility for prescribing our specific requirements lies with Procter & Gamble.
- Primary responsibility for bar code scanability lies with suppliers.
- Suppliers shall use whatever means necessary and sufficient to ensure their bar codes meet our requirements. The ultimate measure of sufficiency is whether the bar codes scan successfully at the P&G receiving site.
- Suppliers should make every effort to ensure no unit loads are shipped from their site to a P&G facility without 100% certainty their bar codes are sufficient.
- Non-compliance with P&G's requirements (i.e., bar codes which do NOT scan at the P&G site) may be grounds for remedial measures (e.g., returning shipments), as well as future grounds for suspending and/or terminating our business relationship(s).
- Suppliers are accountable for inbound and outbound freight costs associated with any shipments to P&G facilities which do not scan in accordance with P&G specifications; In addition, suppliers may be held accountable for the direct labor costs associated with handling unscannable bar codes.



SECTION 5	BAR CODE MANUAL	Page 1 of 1
DATE: 8/2002	TITLE: ATTACHMENT G	ISSUE: REV. 2

The use of reference books is encouraged. A preference is not given to any particular book, but the following have been used by our plants.

BAR CODE REFERENCE BOOKS

The Bar Code Book, Third Edition

By Roger C. Palmer
Helmets Publishing, Inc.
174 Concord Street
Petersborough, New Hampshire 03458

Bar Code Printing

by Ernest E. Campbell, PE
Market Resources
P. O. Box 981
Sandy, Utah 84091-0981

Barcodes Galore

by Harry E. Burke
Tevaki - Jeffery M. Burke
2442 Coronet Blvd.
Belmont, California 94002

Using Bar Codes

by David Jarrett Collins and Nancy Nasuti Whipple
Data Capture Institute
Duxbury, Massachusetts

General EAN Specifications

by EAN International
<http://www.ean.be/>



SECTION 5	BAR CODE MANUAL	Page 1 of 1
DATE: 8/2002	TITLE: ATTACHMENT H	ISSUE: REV. 2

Directions for Calculating Narrow Bar Width for SSCC-18 Bar Code:

X = narrow bar width
L = measured length of bar code

$$X = L / 156$$

1. Measure the length of the bar code to get a value for L.
2. Divide L by 156 to get a value for X. If you used inches to measure L, then your X value will be in inches also.
If you used mm then your X value will be in mm also
3. Convert the X value from inches to mils by multiplying your result by 1000.

Example problem:

1. Length of bar code is 5.22 inches.
 $L = 5.22$
2. Narrow bar width is $L/156$.
 $X = 5.22 / 156$
 $X = 0.0335$ inches
3. Convert inches to mils.
 $0.0335 \times 1000 = 33.5$ mils

In case of mm just apply steps 1 and 2 to get the narrow bar width

Directions for Calculating Narrow Bar Width for UCC/EAN Bar Codes (General):

X = narrow bar width
L = measured length of bar code
 C_B = number of characters encoded in version B of USS-128
 C_C = number of characters encoded in version C of USS-128
 C_{FNC} = number of Function Code characters used in the bar code

$$X = L / [11((C_C/2) + C_B + C_{FNC} + 2)]$$

1. Measure the length of the bar code to get a value for L.
2. Count the number of characters which are encoded using version C of code 128 (C_C). This can be found by looking at a verifier output
3. Count the number of characters that are encoded using version B of code 128 (C_B). This can be found by looking at a verifier output
4. Count the number of function code characters encoded (C_{FNC}). This will include Function Code 1 and Change Code characters.
5. If you used inches to measure L, then your X value will be in inches also.
6. If you used mm then your X value will be in mm also
7. If you used mm then your X value will be in mm also
8. Convert the X value from inches to mils by multiplying your result by 1000.