Embellished Activewear Standards Initiative

Master Carton and Shipment Label Specifications v.2.1

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Master Carton Label Specifications

- 1. The Master Carton Product Label design is based on the bar code label standards developed by the Uniform Code Council (UCC). (See Figures 1 and 9)
- 2. Label Purpose To be used on a single container holding a single part number.
- 3. Specifications refer to the master carton. The specification does not include inner-packs or item markings.
- 4. All bar codes use UCC/ EAN -128 symbology.





- The master carton label should be located so that the printed carton license plate ID (SSCC-18) is located at least 1 1/2 inches and no more than 2 ¼ inches from the bottom of the carton and located along the left edge of the short side of the carton. (See Figure 2)
- 6. The preference is for the shipping label to be located in close proximity to the master carton label on the short end of the master carton (See Figure 2).

Figure 2 - Wrap Around Label and Location on a Master Carton



Notes:

This is to be the location for the label described in Figures 3 and 4 and the Shipping Label in Figure 5. (When placed on an individual master carton).

- 1. Labels should wrap around and be in the lower left quadrant of the short side of the master carton.
- 2. Label must be positioned so that the lowest bar code is a minimum of 1 1/2" from the bottom of the case and no more than 2 $\frac{1}{4}$ ".
- 3. The area from the bottom to the top of the carton and 7 inches back from the corner is reserved for this application. No other labels are to be placed there but carton graphics are OK.
- 4. If manufacturers must use a second label for internal systems, the second label must be as close to the top of the carton as possible to avoid confusion.
- 5. The bottom of the product ID label should be parallel to the bottom of the case.
- 6. If the master carton is not high enough for a shipping label to be place above the master carton label, place the shipping label in the area to the right of the master carton label on the short side of the master carton.
- 7. There is a preference for a wrap around master carton label. The wrap around label may be printed on a single label (4"X12") or two single (4"X6") labels. When two separate labels are used, the labels should be located on adjacent sides of the carton in the assigned space.

- 8. With a wrap around label, the right half is to be a mirror image of the left half. All of the field positions are reversed. For example, in Figure 1, the column containing the style, color, and size fields will be on the right for the left label, and on the left for the right label.
- 9. The bar codes will have a minimum height of 1". The UCC specification suggests a bar code of 1 ¼". Our 4X6" label does not have sufficient room for a bar code with this height. A 1" high bar code with an X dimension > .020" can be read from a distance of 5' with a handheld scanner. Problems could be encountered with a fixed mount scanner if the label is not parallel to the bottom edge of the carton.
- 10. All print fields should be left justified and centered vertically within each block of data (See Figure 1).
- 11. Fonts shall be in upper case bold Arial or Arial Narrow, or equivalent (See Figure 1).
- 12. Each block of data on the label will have a human readable block definition.
 - 12.1 The most important human readable blocks include:
 - 12.1.1 Master Style
 - 12.1.2 Color Code
 - 12.1.3 Size
 - 12.1.4 Case Quantity
 - 12.1.5 The minimum recommended Font Sizes by the Uniform Code Council are:
 - 12.1.5.1 9 pt is equivalent to 0.125 (1/8") in height
 - 12.1.5.2 36 pt is equivalent to 0.500 (1/2") in height
 - 12.1.5.3 72 pt is equivalent to 1.000 (1") in height
 - 12.2 Blocks for bar codes will have human readable information (HRI) printed on the top of the bar code (See Figure 1).
- 13. Please note the above font sizes are nominal and may need to be adjusted depending on your printer software.
- 14. There is a preference to print a box around each of the individual blocks of data on the label (See Figure 1).
- 15. The GTIN is contained in a bar code that also contains the case count. It is positioned above the case ID (SSCC-18). See Figure 1. Note that the bar code in the GTIN block contains both the GTIN and the case count. See Figure 6.
- 16. The GTIN is the primary method of product identification. It is the number used in the PDD and the number sent to identify each product shipped on an ASN. Since it is such an important number and since it is surrounded by some other data elements when seen in a bar code we feel the GTIN should be explained.

- 16.1 In Figure 6 the bar code contains the numbers: (02) 00707738003265 (37) 72. The GTIN consists of the fourteen numbers found between (02) and (37). The GTIN is 00707738003265.
- 16.2 The GTIN has a specific structure. Reading the numbers from left to right, the Packaging Indicator for the GTIN field is "0". This "indicator" fills a variety of needs. In some industries the packaging indicator tells if the container is an item, a carton, an inner pack, or a pallet. For our purposes, we have determined to use a packaging indicator of "0" in the GTIN field. (See figure 6) The Packaging Indicator is also a "0" in the SSCC-18 on the master carton label (Case Identification field). (See figure 7) The packaging indicator is a "4" when used with an SSCC-18 as the Shipment Identification field. (See figure 8) The Shipment Identification field is used to link the shipment in an ASN.
- 16.3 The next position is another "0". This is a filler character placed in front of the UCC Company Identification number 707738. The UCC Company Identification Number is also used in the SSCC-18 as the ASN shipment identification and the Case Identification field for the Master Carton. The UCC Company Identification Number is assigned by the UCC (937-435-3870) for details.
- 16.4 The Company ID is followed by 00326. When it is combined with the Company ID it becomes is unique item number assigned by the company responsible for identifying and naming the product. (See 17)
- 16.5 The last number, which in this example is a "5", is a Mod 10 check digit. The Mod 10 check digit is calculated from all the other digits in the number, including the Packaging Indicator. You can obtain instructions for calculating the Mod 10 check digit from the UCC.
- 16.6 The numbers that that surround the GTIN 00707738003265 consist of an (02) and an (37). The (02) is found to the left is an Application Identifier (AI). The (37) is another AI that tells the system that the following digits "72" represents the case count. The parenthesis () are provided to help people read the numbers, they are not part of the data.
- 16.7 The Application Identifier is used by the bar code system to determine the type of information it is reading. The use of these application identifiers (AI) is based on the list of application identifiers found in Application Standards For Container Codes June 19, 1996 ANSI/UCC6-1996 Table 9, Page 44 and Appendix C, Page 63

The same information is contained in the Guidelines For Supply Chain Identification, Issue 02, November 1998 Table B.1.2, Pages 156 and 157

A full description of the use of these AI's is found at: UCC/EAN-128 APPLICATION IDENTIFIER STANDARD (January 1993) (Revised and Reprinted July 1995) <u>http://www.gs1-128.info/</u> Appendix E

Please note, the application identifier (AI) may or may not be passed to your internal computer system depending on what options you select in your bar code reading equipment. **It is important to**

note the AI is not part of the actual GTIN ID, Case Quantity, or Case ID and is not stored in the computer file.

- 17. When a distributor contracts with a supplier for private label products, it is the responsibility of the distributor to assign a GTIN number. In some cases this can be done by the supplier on behalf of the distributor. It is up to the two trading partners (wholesale/distributor and manufacturer) to work out the details on a case by case basis.
- 18. The GTIN and Case Quantity bar code field (See Figure 6)
 - 18.1 Data Content
 - 18.1.1 Use a UCC/EAN -128 bar code symbology
 - 18.1.2 The application identifier (AI) for GTIN is "02"
 - 18.1.3 The application identifier (AI) for Case Count is "37"
 - 18.1.4 The dimensions of the GTIN and Case Quantity field is 1 1/4" by 3 5/8"
 - 18.1.5 Please note: The GTIN is concatenated with the application identifier (AI) of 37 followed by the piece count in the case. According to the UCC/EAN-128 application identifier standard (January 1993, revised July 1995) chapter 3, paragraph 3.4, "You can combine fixed length fields without using a field separator. The next AI immediately follows the last character in the data field for the previous AI." For example, in Figure 6, the data string is 02007077380032653772 where 02 is the application identifier, 5 is the last digit (calculated check digit) in the GTIN, 37 is the data identifier for the case quantity, 72 is the case quantity.
 - 18.2 The specifications for the GTIN and Case Quantity and bar code symbol are:
 - 18.2.1 Bar Code Symbology UCC/EAN 128 (note: UCC/EAN-128 is a version of Code 128 that has been set to EAN/UCC standards for encoding product information. See "Guidelines For Producing Quality Symbols" Issue 04, June 1998 Section 1.8.3
 - 18.2.2 Bar Code Height (inches) 1.000"
 - 18.2.3 Narrow Bar / Space Width X Dimension Nominal 0.020 inches Note: X can be as small as .0132 inches but is not recommended. The larger dimension is desirable for longer distance scanning.
 - 18.2.4 Type Code C (All numeric)

Must encode only numeric characters in the bar code Do not encode alphabetic or special characters in the bar code Do not encode blanks or spaces in the bar code Do not encode parenthesis in the bar code. Parenthesis will be used only for human readable information (See Figure 6, 7, 8)

18.2.5 Human Readable

Above the bar code Character Font – Arial or equivalent Character height (inches) – 0.165" See Figure 6 for a detailed description of the GTIN and case quantity bar code field.

- 19. Case Identification SSCC-18 (See Figure 7)
 - 19.1 Data Content
 - 19.1.1 Use a UCC/EAN 128 bar code symbology
 - 19.1.2 The application identifier for the SSCC-18 is "00"
 - 19.1.3 The packaging indicator for the carton level is a "0"
 - 19.1.4 The dimensions of the SSCC-18 data block is approximately 1 1/4" by 3 5/8"
 - 19.2 The specifications for the Serial Shipping Container (SSCC-18) bar code symbol are as follows:
 - 19.2.1 Bar Code Symbology UCC/EAN 128 (note: UCC/EAN-128 is a version of Code 128 that has been set to EAN/UCC standards for encoding product information. See "Guidelines For Producing Quality Symbols" Issue 04, June 1998 Section 1.8.3
 - 19.2.2 Bar Code Height (inches) 1.000"
 - 19.2.3 Narrow Bar / Space Width X Dimension Nominal 0.020 inches Note: X can be as small as .0132 inches. The larger dimension is desirable for longer distance scanning.
 - 19.2.4 Type Code C (numeric only)

Must encode only numeric characters in the bar code Do not encode alphabetic or special characters in the bar code Do not encode blanks or spaces in the bar code Do not encode parenthesis in the bar code. Parenthesis will be used only for human readable information. (See Figure 7)

19.2.5 Human Readable

Above the bar code Character Font – Arial or equivalent Character height (inches) – 0.165" See Figure 7 for a detailed description of the Case Identification Field.

**Additional Information Regarding SSCC-18: <u>http://www.gs1-128.info/sscc-18</u>

Examples of Master Carton Label with Mapping to Data Files

The data contained in each block of information found on the label must either come from a field in the Product Descriptor Database (PDD) or a field in some internal file. Figures 3 and 4 identify the field in the PDD file where the information is found. Information contained in the blocks on the label must also be sent in an ASN. Figures 3 and 4 map the block on the label to the field in the ASN where the information is found. In some cases the manufacturer will use the optional fields for internal applications. *Please note that the field references are from the Detail section of the PDD 832 v7.0 and ASN 856 v5.0 file unless otherwise noted.*

Following are examples of two master carton labels (Figures 3 and 4) and the label used to link a shipment to an electronic ASN (Figure 5).

1. The first master carton label (Figure 3) is shown in a landscape layout. This is the recommended label. The longest dimension is the width (6" for a single label and 12" for a wrap around label). This label is designed to have two stacked bar codes in a picket fence

layout. This label can be printed using a 4" wide bar code printer. The bar code is printed perpendicular to the web.

- 2. The second label (Figure 4) is another example of the master carton label. It is shown in a portrait mode. The longest dimension is the height (6") and the width is the shortest dimension (4").
- 3. The third label (Figure 5) is the Shipment Label. It is used to link the shipment to the electronic ASN file. Please note that the Shipment Label is optional

Figure 3 – Detail Master Carton Label Landscape Mode (Preferred) 4" X 6" Master Carton Label - Landscape Mode

Bar code printed perpendicular to web on a 4" bar code printer.

Stacked bar code layout (picket fence) with printed boxes around each block of data (not to scale)



Figure 4 – Master Carton Label in Portrait Mode 4" X 6" Master Carton - Portrait Mode

Bar code printed parallel to web on a 4" bar code printer

Stacked bar code layout (picket fence) with printed boxes around each block of data (not to scale)



Figure 5 - Shipment Label (Link to the electronic ASN) 4" X 6" Label (Not to scale)



Figure 6 - Bar code field definitions for GTIN and Case Quantity

This includes the GTIN product ID (PDD Field 4/ASN DET Loop B Field 2) and Case Quantity (ASN DET Loop B Field 9)



(Note: See labels in Figures 3 and 4)

Figure 7 - Bar code field definitions - Case Identification Field (SSCC-18) Case Identification Field (ASN DET Loop A Field 3)



(Note: See labels in Figures 3 and 4)



(Note: See label in Figure 5)



Figure 9 - Master Carton Label – To Scale 4" X 6" paper stock