

# Australian GUSI Project

## Fact Sheet 3 – Trade Item (non-retail) additional barcoded data

17 November 2008

### Non Retail Variable Weight or Fixed Weight bar codes requiring additional information.

The GS1-128 Bar Code allows secondary attribute information over and above primary item identification to be represented in bar code format. Application Identifiers (AIs) effectively act as prefixes for this information and define the meaning and structure of the embedded data which follows.

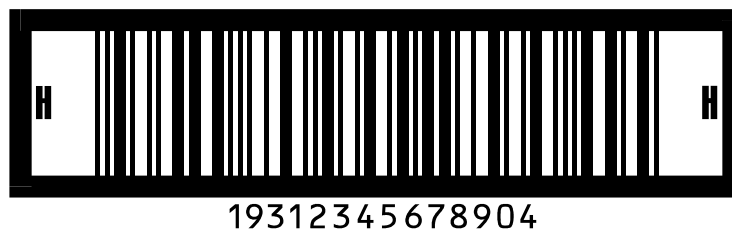
AIs allow you to represent attribute information such as batch numbers, serial numbers, expiry dates and measurements in a standard format. This ensures that the attribute information encoded by one company can also be scanned and interpreted by any other company in the supply chain.

How to identify variable weight or fixed weight non retail items is not covered in this document. Please refer to the GS1 Australia Numbering and Bar coding User Manual.

The following examples describe the minimum and optional data that can be used to identify non retail items of either variable measure or fixed weight. Following the example is a reference table explaining each AI.

The other bar code symbol that is used to encode a non retail trade item's primary identification (Global Trade Item Number – GTIN) is an ITF-14 (Diagram A). This bar code only holds the GTIN. If this bar code is used additional information can be applied in a GS1-128 Bar Code (formerly known as UCC/EAN 128).

**Diagram A: GTIN-14 represented in an ITF-14 Bar Code**



### Example 1: Minimum Required Data to Identify Non Retail Variable Measure Product

This label format should be used when the trade item is an orderable trade item that may vary in measure. For example Beef fillet, 26kg.

**Diagram B: GTIN-14 and Weight represented in GS1-128 Bar Code**



AI	Example Data & Format	Attribute Information
(01)	<b>99327111031766</b> n14- 14 digits numeric (fixed length)	<b>Global Trade Item Number</b> Item Identification. (Primary identification of the product carton) 9 indicates that it is a variable measure (weight) product 932711103 - GS1 Company Prefix. (7, or 9 digits in length depending on the GS1 prefix allocated) 176 – Item Reference 6 – Check digit
(310n)	<b>2600</b> n6 - 6 digits numeric (fixed length)	<b>Net Weight - Kilograms</b> In this example as n = 2, start at the very right of the measurement data field and count to the left 2nd place. The net weight is 26.00kg. (n indicates that the position of the decimal point is n places to the left of the end of the number e.g. 3102 ) NB: Measure information is mandatory if the item is a variable measure trade item.

If a variable measure GTIN is applied in a GS1-128 Bar Code it must always have its corresponding measure represented in the application AI.

### Example 2: Non Retail Variable Measure Product with additional information

This label format should be used when the trade item is an orderable trade item that may vary in volume This example contains GTIN-14, net volume in litres and batch number represented in the bar code. E.g. Malt, 26 litres with batch number 1006

Diagram C: GTIN-14 and Net Volume represented in GS1-128 Bar Code



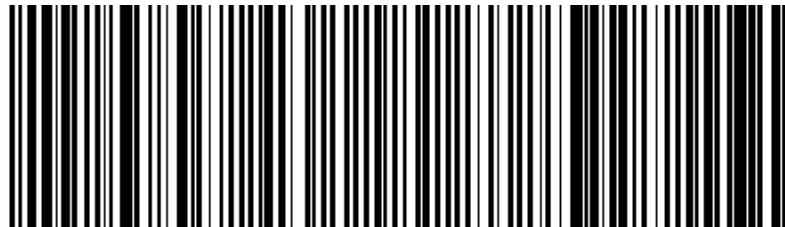
(01)99311791001157(3152)2600(10)1006

AI	Title on Label	Example & AI Data Format	Attribute Information
(10)	<b>Batch / Lot Number</b>	<b>1006</b> an...20 – alpha numeric up to 20 characters (variable length)	<b>Batch or Lot Number</b>
(315n)	<b>Net Volume (l)</b>	<b>2600</b> N6	<b>Net Volume Litres Trade</b> To identify the net volume of a trade item in litres. In this example the net volume in litres will equal 26. Measure information is mandatory if the item is a variable measure trade item

**Example 3: Non Retail Fixed Measure Product with additional information**

This label format should be used when the trade item is an orderable unit or standard grouping of trade items. This example GTIN-14 and batch number is represented in the bar code. E.g. Ctn Sugar 2kg x 6 with batch number 1123

**Diagram D: GTIN-14 and Batch represented in GS1-128 Bar Code**



**(01)19311791001151(17)091030**

AI	Title on Label	Example & AI Data Format	Attribute Information
(17)	<b>Use By or Expiry</b>	<b>091030</b> n6 – numeric fixed 6 digits	<b>Expiration Date (YYMMDD)</b>  To indicate an expiration date, a date that determines the limit of consumption or use of trade item. It is a statement about public safety.

**Additional Application Identifiers (AIs)**

AI	Title on Label	Example & AI Data Format	Attribute Information
(21)	<b>Serial</b>	an...20 – alpha numeric up to 20 characters (variable length)	<b>Serial Number</b>  Combined with a GTIN the serial number uniquely identifies each individual trade item  AI 21 must always be used with AI 01
(316n)	<b>Net Volume (m3)</b>	N6	<b>Net Volume Cubic Metres Trade</b>  To identify the net volume of a trade item in cubic metres, or the measurement normally arrived at by multiplying the maximum length, width and height of a trade item.
(11) Or	<b>Prod Date</b>	n6 - 6 digits numeric (fixed length)	<b>Production Date (YYMMDD)</b>  This is the production or assembly date determined by the manufacturer.
(13) Or	<b>Pack Date</b>	<b>081230</b> n6 – numeric fixed 6 digits	<b>Packaging Date (YYMMDD)</b>  This is the date when the goods were packed as determined by the packager.
(15)	<b>Best Before or Sell By</b>	n6 – numeric fixed 6 digits	<b>Best Before Date (YYMMDD)</b>  To indicate the best before date for the ideal consumption or best effective use date of a product. This is a statement about the quality of a trade item

There are other AIs that can be used at the discretion of the supplier. This may require an additional bar code, due to the number of characters that can be encoded in the GS1-128 Bar Code Symbol. For a full list of AIs please refer to the GS1 Australia Numbering and Bar Coding User Manual.

### Further information

For further technical information on the below topics can be found in either the industry Numbering and Bar coding guidelines [www.gs1au.org/industry/](http://www.gs1au.org/industry/), the GS1 Australia Numbering and Bar Coding User Manual by visiting [www.gs1au.org/information\\_library/user\\_manuals.asp](http://www.gs1au.org/information_library/user_manuals.asp) or by contacting GS1 Australia on 1300 366 033.

How to allocate a GTIN  
GS1-128 or ITF-14 Symbol Dimensions  
Bar Code Symbol Orientation and Placement  
Number of Bar Code Symbols