

Guideline

Labelling logistics units

[Source: BG5RL-LO001]
Version 1 – 05.05.2021

Herbert Ospelt Anstalt; Schaanerstrasse 79; FL-9487 Benden
Ospelt Food AG; Tiefrietstrasse 7; CH-7320 Sargans
Ospelt Food Est. ZN Apolda; Über dem Dieterstedter Bache 14; D-99510 Apolda
Ospelt petfood Anstalt ZN Apolda; Liechtensteiner Strasse 5; D-99510 Apolda
Panetta SA; Steinhaldenstrasse 14; CH-8954 Geroldswil

Contents

Guideline	1
1. Preamble:.....	3
1.1 Objective.....	3
1.2 Source	3
2. Packaging hierarchies and identification:.....	3
3. Definition "logistic unit"	4
4. Labelling logistics units	4
5. Layout of the standard logistic label.....	5
6. Logistic label technical information	5
6.1 Label size	5
6.2 Label placement on pallets.....	6
6.3 Label placement on parcels.....	6
6.4 Barcode height	6
6.5 Data elements on the logistic label.....	7
6.6 Additional label (optional)	7
6.7 Connection between SSCC and EDI.....	8
7. Glossary	8

1. Preamble:

1.1 Objective

This guideline governs the aspects important for the Ospelt Group in labelling logistics units. It is intended to ensure the identification of logistic units and automated processing in Incoming Goods.

1.2 Source

The explanations correspond with the GS1 Standard (validated by GS1 Switzerland).

The source for this document is "The GS1 Logistic Label" of GS1 Switzerland. Some sections are adopted as is without the respective citation reference in detail. This is only used in line with this not non-public guideline and for readability reasons.

As the additional basis are referencing the following GS1 Switzerland documents at this point:

- "The GS1 Logistic Label Guideline"
- "GS1-128 Symbology Specifications"

2. Packaging hierarchies and identification:

The relevant hierarchy levels are defined as follows:

A logistic unit (LU), or logistic unit, is a collection of traded units individually compiled for the purpose of transport and/or temporary storage.

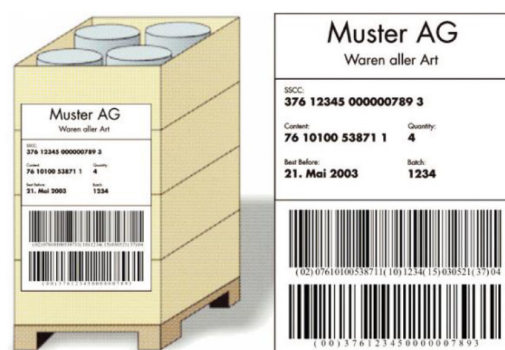


Figure 1: Logistic Unit

The hierarchy level relevant in transactions between industry, wholesale and retail business is referred to as traded unit (TU).



Figure 2: Traded Unit

The next hierarchy level down, the consumer unit (CU), is not detailed in this guideline.



Figure 3: Consumer Unit

3. Definition "logistic unit"

Logistic units must be marked with the unique 18 digit "Serial Shipping Container Code" (SSCC for short). Each logistic unit has a unique SSCC to track it along the entire supply chain. The SSCC can further be used as a reference number to refer to EANCOM messages or link to a paper delivery note.

Only homogeneous logistic units are accepted for delivery at Ospelt. These are single SKU units which only contain the same type of traded unit per logistic unit. This allows encrypting the identification and quantity of these traded units as additional information in the code.

Heterogeneous logistic units are only permitted for product deliveries at the express request of Ospelt.

This means any type of:

- Sandwich pallets
- Mixed pallets
- Rainbow pallets

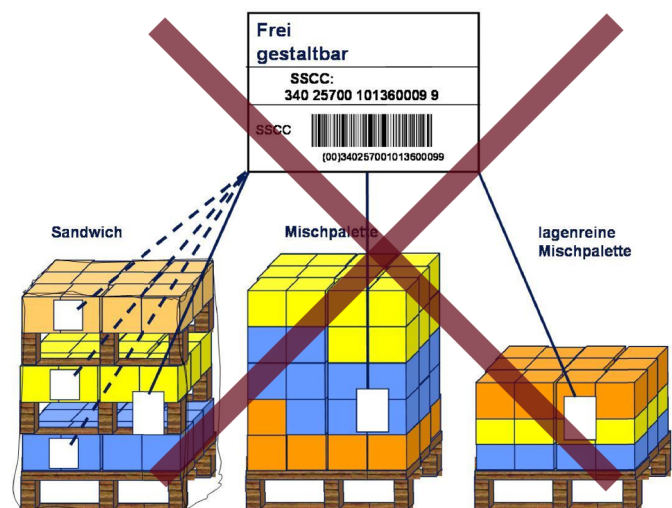


Figure 4: Heterogeneous logistic units

4. Labelling logistics units

Each logistic unit must be labelled to ensure it can be identified in the supply chain and information is visible machine readable in receiving (e.g. regarding the contents, receiving point, etc.).

The information related to the LU is shown as a barcode (for automatic recording and processing) and in plain text (for manual recording and processing).

For deliveries to Ospelt, in addition to the code the following information must be shown in plain text at a minimum:

- Ospelt material number
- Ospelt material text as per Contract
- GTIN Global Trade Item Number

- Quantity and unit
- Best before date (BBD)
- Production date
- Supplier batch

For details, see chapter "6.5 - Data elements on the logistic label" of this guideline.

5. Layout of the standard logistic label

On principle, the GS1 Switzerland standard logistic label can be used for reference, however the minimum information specified in chapter "6.5 - Data elements on the logistic label" must be included. The label is divided into the following three areas:

- 1** Company name and manufacturer information, resp. its company logo.
- 2** Important information for the supplier/recipient in plain text, however at a minimum the information in the barcode.
 - The minimum requirements relevant for Ospelt must be observed.
- 3** Information in barcode form for automated machine processing. GS1-128 is used as the barcode symbology. With GS1-128, all information is shown in so-called data elements which are identified using a Application Identifier (AI). The size and format of the data field following the AI, which contains the actual information, is clearly defined (for a detailed description, see the GS1 specification in chapter 3).



Figure 5: Standard logistic unit

6. Logistic label technical information

6.1 Label size

The standard size for deliveries to Ospelt is DIN A5.

Deviations (as per GS1 DIN A6 and DIN A7 are generally permitted) must be approved by Ospelt in writing before they may be used.

6.2 Label placement on pallets

The standard label should be applied to at least two adjacent sides, one long side and front end. For shrink-wrapped pallets, the labels must be applied to the shrink film, not below it. All types of pallets, including full pallets containing individual traded units, the target height of the bottom edge of the barcode is between 400 mm and 800 mm above the standard surface the pallet is sitting on. For pallets less than 400 mm high, the barcode symbol should be applied as high as possible, ensuring the barcode is protected. The symbol, including quiet zone should be applied at least 50 mm from all vertical edges to prevent damage.

Comment: In the case of reusable pallets, labels must be fully removable. In the case of LT goods, LT compatible labels must be used. In the case of mesh grates on pallets, the labels are not glued but instead inserted in the designated holder. In general, no other barcodes may appear in the read area.

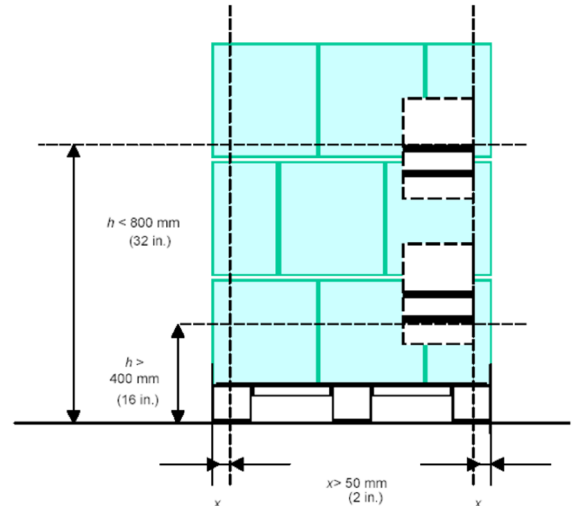


Figure 6: Label placement on pallets

6.3 Label placement on parcels

For cartons, outer packaging and overpacks, the symbol placement varies in practice. However, the target height for the bottom edge of the barcode is 32 mm from the area the unit is sitting on. The symbol, including quiet zones, should be at least 19 mm from all vertical edges to prevent damage.

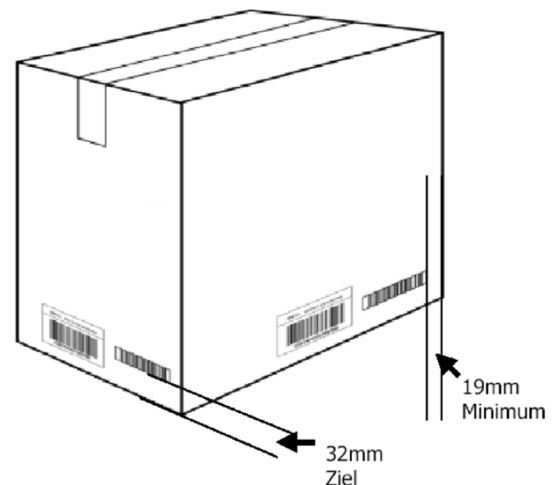


Figure 7: Label placement on parcels

6.4 Barcode height

The barcode height should generally be at least 31.75 mm. If these values cannot be met for space reasons (e.g. very small logistic units), the minimum height should never be less than 13 mm. The size of the X module should not be less than 0.5 mm whenever possible. Please note, the Quiet zones before and after the codes should be observed.

6.5 Data elements on the logistic label

Information in the standard label (not pre-picked logistic units)		Homogeneous logistic unit		
Data element	AI	Format	Plain text	Barcode
SSCC (logistic unit identification)	00	N18	Must	Must
** GTIN of the traded unit (if the logistic unit is a product which can be ordered)	01 + 31	N14 N..8	** May May	** May May
** GTIN of the traded unit inside and the quantity of the units inside	02 + 37	N14 N..8	** May May	** May May
Option	20	N2	May	May
Product identification			Must	-
Additionally relevant for feed and food:				
Production date			Must	-
Best before date	15	N6	Must	Must
Batch / production lot number	10	AN..20	Must	Must
Additionally recommended for cross-docking and / or logistics providers:				
Ship for Loc (final recipient = GLN of the shop)	413	N13	May	May
Ship to Loc (consignee = GLN of the consignee)	410	N13	May	May
... additional AIs as per the general GS1 specifications (chapter 3)				

Table 1: Data elements on the logistic label

** One of the AIs - AI(01) or AI(02) - must be included in the logistic label. The respective second AI must not be shown then.

Due to the heterogeneous logistic unit not permitted at Ospelt (see chapter 3 - Definition "logistic unit"), these definitions as per GS1 Standard are not further explained in the table above.

6.6 Additional label (optional)

In the read area on pallets (bottom edge of the barcode between 400 mm and 800 mm above the standard surface) no other labels with any type of barcode may be applied apart from the SSCC label.

An additional label is used when information must be shown which is not permitted in the standard label according to GS1 rules. It is advisable to repeat the SSCC of the standard labels **in plain text** on the additional label.

6.7 Connection between SSCC and EDI

If an EDI DESADV (electronic delivery note) is submitted to the consignee which includes the SSCC number prior to physical delivery of the goods, said is able to add the delivery in the ERP system in advance.

At the time of physical delivery, Incoming Goods can then scan the SSCC label to post it in the ERP system.

Ospelt relies on this process being observed, including receiving the EDI DESADV with SSCC number.

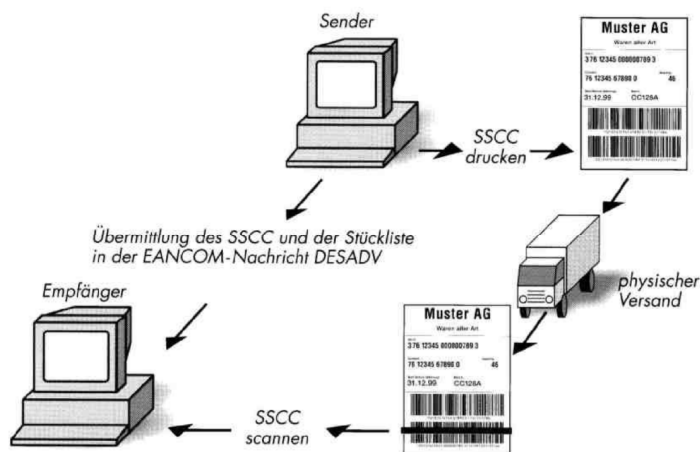


Figure 8: SSCC and EDI

7. Glossary

Term	Definition
AI	Abbreviation for "Application Identifier", a component of the "Application Identifier Standard" (AI Standard). The German term for AI is application identifier. Within a data element, the AI defines the significance of the format, length and contents of the data field. AIs have 2, 3 or 4 characters. AIs are encoded in GS1-128 symbology.
AI Standard	Application Identifier Standard. This standard is used to define all data elements with AIs. The AI Standard is used in the GS1-128 barcode symbology.
CU	Abbreviation for Consumer Unit
Data designator (DB)	➔ See AI, Application Identifier
Data element (Element string)	Data structure of the GS1 system with a defined standard structure and meaning. It consists of a application identifier (AI) and the related data field.
Data field	Part of a data element containing the actual information.
DESADV	Despatch Advice, EANCOM message which corresponds to the electronic delivery note.
EAN-13 symbol	Name of the EAN/UPC barcode symbology the 13-digit EAN number (GTIN) are shown in. -> Readable omnidirectional
EANCOM	International telecommunications standard of GS1; a subset of the UN/EDIFACT standard.
GLN	Abbreviation for "Global Location Number"
Global Location Number	13-digit identification number used to clearly identify an address.
Global Trade Item Number	A Global Trade Item Number (GS1 identification number) can be shown in the GTIN-8, GTIN-12, GTIN-13 or GTIN-14 standard numbering structure.
GS1 logistic label	Standard for marking any type of logistic unit (pallets, cartons, parcels, etc.) with defined contents and image. In this guideline also referred to as standard label or standard logistic label.

GS1 numbers	An identification number for an object formed according to the GS1 rules (e.g. GTIN, SSCC, GLN,...).
GS1-128 (formerly EAN/UCC-128)	An extremely efficient barcode symbology based on Code 128. The GS1-128 uses the Application Identifier Standard (AI Standard) which can be used to code different application-specific information through predefined AIs.
GTIN	Abbreviation for "Global Trade Item Number"
Traded unit	Defined multiple of consumer units or traded units which is typical as a delivery, ordering and invoicing unit between business partners.
INVOIC	Invoice, EANCOM message which corresponds with the electronic invoice.
Plain text information	Information in the logistic label which can be interpreted by humans.
Logistic unit	See logistic unit.
LU	Abbreviation for Logistic Unit. -> see logistic unit.
Scanner	Electronic device which converts optical information (e.g. a printed barcode symbol) into electronic signals for subsequent decoding and transmits it to a computer.
Ship for Loc	Application identifier AI (413) from the Application Identifier Standard for "GS1 Global Location number of the final recipient (for split transport)". The correct use is explained in chapter 3 of the "General GS1 specification".
Ship to Loc	Application identifier AI (410) from the Application Identifier Standard for "GS1 Global Location Number of the consignee". The correct use is explained in chapter 3 of the "General GS1 specification".
SSCC	Abbreviation for "Serial Shipping Container Code". 18-digit serial number for marking logistic units.
Logistic unit	Unit prepared for transport or storage purposes with contents which are typically not standardised.
TU	Abbreviation for traded unit. Definition see traded unit.
Consumer Unit	Merchandise item and products intended for consumers or end users which are scanned at the POS (point of sale). Also referred to as consumer unit.
X module	The width of the most narrow element (line or gap) of a barcode symbol.