

GS1 compliance with Packing, Packaging and Labelling

Patrick ADLER

01 Nov 2023

Contents-

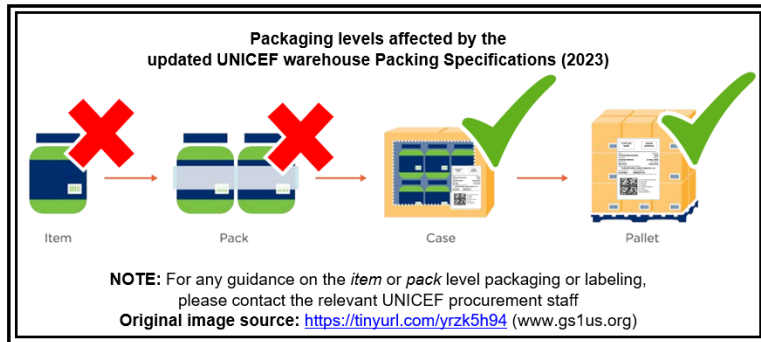
1. Scope
2. Availability
3. Impact
4. What is GS1?
5. The Labels
6. Feedback and support mechanisms
7. Pre-approval and Penalties
8. Conclusion



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1. Scope

- Updated Packing Specifications roll-out in 2023
 - New Supplier Packing requirements for inbound POs from Supplier to SD WH, Hubs and COs
 - **Applicable** to all Supply Division managed POs
 - **Applicable** to all Cases and Pallets
 - **Not Applicable** to Sales Unit packaging



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2. Availability of Specifications-

← → ↻ unicef.org/supply/technical-specifications-packing-packaging-and-labelling 🔍 📄 ☆ 📱 📺 ⚙️ 🗖️ 👤

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Supply Division

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📄 Page

Technical specifications for packing, packaging and labelling

UNICEF's standard requirements for packing, packaging and labelling.

Specific arrangements or agreements with individual suppliers may overrule the conditions described in the documents listed below.

[Updated specification \(to be enforced from 2 October 2023\).](#)

<u>For all shipments to Copenhagen (to be retired on 1 October 2023).</u>	<u>For all shipments outside Copenhagen (to be retired on 1 October 2023).</u>
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3. Impact on all Suppliers

- No material change in Case or Pallet requirements from the previous specification.
- More stringent requirements in terms of the use of **recyclable** strapping, corner boards, edge protectors and top caps.
- More material handling requirements in terms of monitoring for Water Exposure, Dust and Mold
- Updated Packing List requirements with additional mandatory details
- Suppliers must now provide GS1 compliant labels
- SSCC, GTIN, CONTENT are now **MANDATORY** fields for all Medicines, Medical Devices and IT equipment and remain **optional** for all other material categories
- UNICEF Material Description is now **MANDATORY** for all Cases and Pallets.

UNICEF Packing Specifications on Packaging, Palletization and Labelling			
unicef	Version	Date	Status
	R2	April 2023	REVIEW DRAFT

TABLE OF CONTENTS

VERSION CONTROL	1
1. SCOPE AND GENERAL REQUIREMENTS	3
2. CASES AND PALLETS	3
2.1. Case Specifications	3
2.2. Pallet Specifications	4
2.3. Case Stacking	4
2.4. Pallet Wrapping	5
2.5. Pallet Strapping	5
2.6. Water Exposure, Dust and Mold	5
2.7. Packing Configuration of Shipments with Multiple POs, Materials/SKUs, or Batches	6
3. PACKING LIST	6
3.1. General Requirements	6
3.2. Single shipment	7
3.3. Multiple shipment	7
4. GS1 COMPLIANT LABELLING	7
4.5. Barcode labelling	7
Table 1. GS1 Application Identifiers to be used on UNICEF labels	8
4.6. Quantity	10
4.8. Date formats	10
4.9. Case Label Size and Positioning	10
4.10. Pallet Label Size and Positioning	10
4.11. Label format compliance	10
ANNEX A – A6 PALLET LABEL SAMPLE	11
ANNEX B – A7 CASE1 LABEL SAMPLE	12
ANNEX C – A7 CASE2 LABEL SAMPLE	13

4. What is GS1?

- **Non-Profit** Global Standards Organization
- Established in 2005
- Known primarily for providing barcode specifications and standards.
- Maintains a database of unique product identifier numbers (**GTIN**)
 - GS1 barcodes/GTINs are necessary for most online and traditional retailers including Amazon, eBay, Alibaba, Google, Carrefour, Tesco and Walmart
 - Cost for registration is ~\$30 USD / unique product (plus annual renewal)
- Local offices in 116 countries
- 2 million user companies
- GS1 barcodes are scanned **6 billion times** / day
- Source: <https://packagingeurope.com/news/the-barcode-turns-50-and-is-about-to-change-our-lives>
- Source: <https://www.gs1.org/standards/get-barcodes>
- Source: <https://www.gs1.org/about>



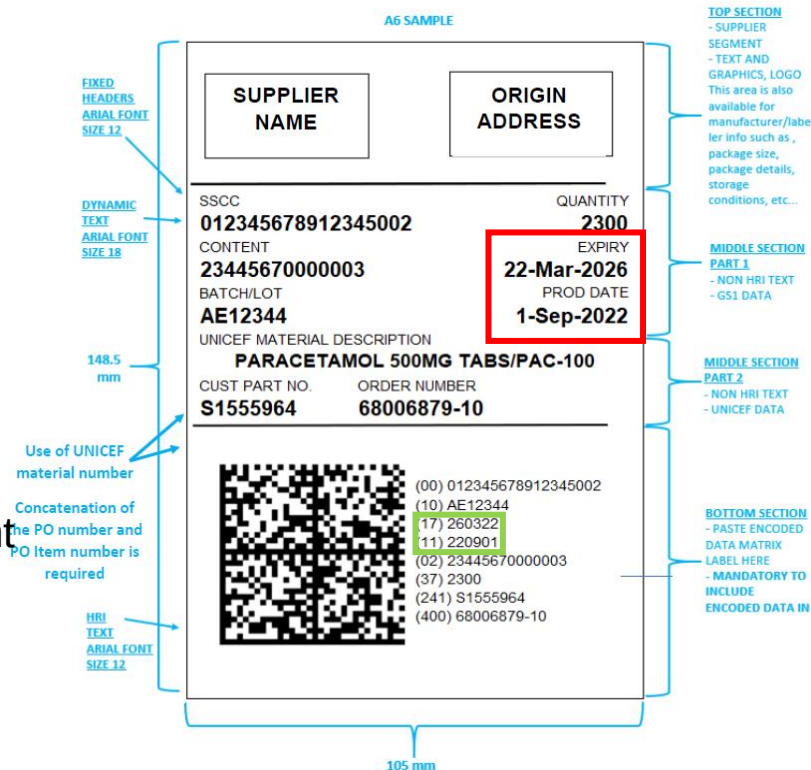
GS1 Company Prefix Pricing

Number of items needing a barcode/GTIN**	Initial fee	Annual renewal fee
1 GS1 US GTIN	\$30	None
10	\$250	\$50
100	\$750	\$150
1,000	\$2,500	\$500
10,000	\$6,500	\$1,300
100,000	\$10,500	\$2,100
GS1 Company Prefix including U.S. FDA NDC Labeler Code.	\$2,100	\$2,100

Source: <https://www.gs1us.org/upcs-barcodes-prefixes/how-to-get-a-upc-barcode>

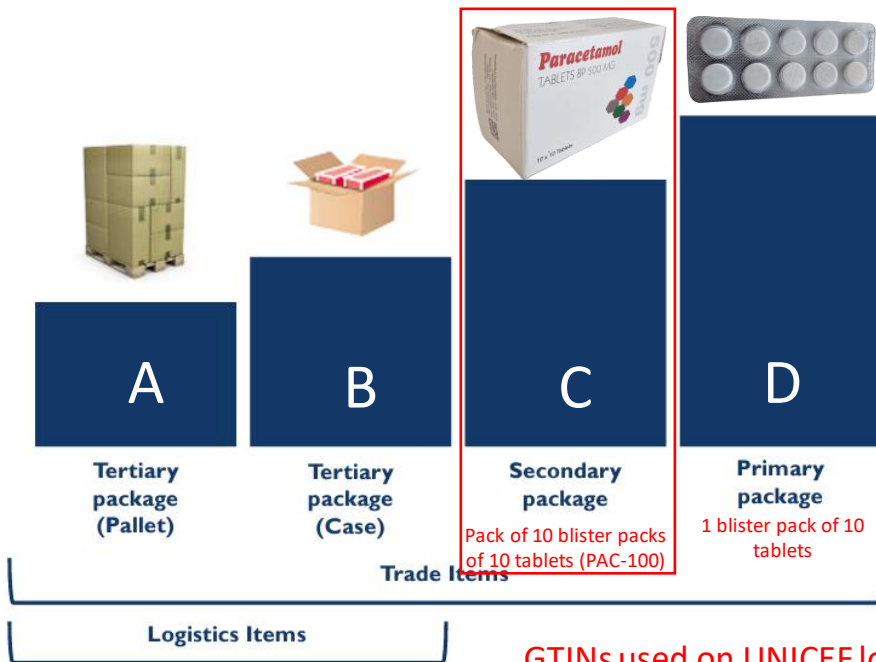
5a. The Labels

- **MANDATORY** for all Cases (A7) and Pallets (A6)
- Harmonization with international standards
 - USAID Global Health Supply Chain Program released standards in August 2023
- Downstream traceability
- Compliance with future regulatory requirements
 - Inclusion of Global Trade Item (GTIN), serial and batch numbers, production and expiry dates are recommended as mandatory for all Medicines, Medical Devices and IT equipment
- Use of single 2D DataMatrix
- Change/Clarification in Date Formatting (Human readable vs encoded)



5b. The Labels

Different packaging levels require different GTINs



SUPPLIER NAME		ORIGIN ADDRESS	
SSCC		QUANTITY	
012345678912345002		2300	
CONTENT		EXPIRY	
23445670000003		22-Mar-2026	
BATCH/LOT		PROD DATE	
AE12344		1-Sep-2022	
UNICEF MATERIAL DESCRIPTION			
PARACETAMOL 500MG TABS/PAC-100			
CUST PART NO		ORDER NUMBER	
S1555964		68006879-10	
		(00) 012345678912345002	
		(10) AE12344	
		(17) 260322	
		(11) 220901	
		(02) 23445670000003	
		(37) 2300	
		(241) S1555964	
		(400) 68006879-10	

GTINs used on UNICEF logistics labels must be the same unit of measure (UoM) as the UNICEF Material Number (ie; typically the Sales Unit)

6. Feedback and Support Mechanisms

Feedback

Name _____

Email _____

Subject _____

Message _____

Submit

- PackingSpec@unicef.org email established where all concerned stakeholders can file a complaint, comment or provide feedback.
- Accurate logging of complaints and actions taken
- KPI of one week for the team to reply.
- FAQ doc developed.

**Frequently Asked Questions (FAQs):
Updated UNICEF Packing Specifications (2023)**

19 October 2023

Any exception to the Packing Specifications must first be agreed with the consignee and then flagged in the Purchase Order document.

GENERAL INFORMATION, PACKING & PACKAGING

Q1: When do the updated Packing Specifications come into effect?

A1: Compliance with the [updated packing specifications](#) is required for any new Purchase Order signed on or after October 2, 2023. Any orders received by Suppliers before 02 October do not need to comply with the updated requirements.

Q2: Our company signed a Long-Term Agreement (LTA) with UNICEF based on the previous Packing Specifications. Do we need to comply with the updated requirements?

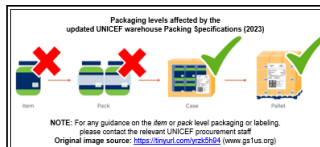
A2: Yes. Agreed text in the [Contractual Provisions for Goods](#) section of the UNICEF LTA states that:

"The Supplier will comply with the requirements (as updated from time to time) for packing, packaging, packing list and labeling goods set out at http://www.unicef.org/hqsupplychain_41950.html ..."

This web page has now been updated with the new Specifications.

Q3: What levels of packaging are covered by the updated Specifications?

A3: Please see below:



**Frequently Asked Questions (FAQs):
Updated UNICEF Packing Specifications (2023)**

Q4: Do the packaging and labeling specifications apply to my materials?

A4: All Suppliers that have been issued a UNICEF PO with the prefix "45", "62" and/or "68" should comply with the updated packing specifications.

Any exception to the Packing Specifications must first be agreed with the consignee and then flagged in the Purchase Order document.

Q5: Does the requirement for non-recycled material in packaging components apply to all cartons and cases?

A5: Yes. This requirement is due to a concerning trend of sub-standard cartons being delivered to our warehouses. UNICEF often receives supplier export cartons for subsequent outbound deliveries. Suppliers may be issued an exemption if they can prove that their carton is sufficiently robust to handle re-export.

Please submit a sample of your carton and a supporting letter detailing your reason for requesting an exemption and describe the technical characteristics (complete list of specifications is below of your cartons) to our Copenhagen address:

Carton Sample Review team
c/o Warehouse Goods Receipt Dept.
10-17, Døssøvej 2150
Copenhagen, Denmark
Email: PackingSpec@unicef.org

To receive exceptional permission from UNICEF to not use virgin cardboard, provide proof of full compliance with the following specifications:

1.1 Export cartons

1.1.1 Design

Box style	Full-overlap vertical container (FOSC)
UNICEF BSC Code	Not specified as described below
Closure	Outside flap, glued and stitched
Box designation	10' (3048 mm)
Structural instructions	Making inner flaps: All corners of long side flaps are chamfered 25x25 mm.

1.1.2 Quality and standards

Edge Compression Test (ECT)	3" x 17" Min	(EN ISO 3037)
Boxing strength (Mullen)	≥ 2200 kPa	(EN ISO 2796)
Water Absorbency (Cobb 1800)	≤ 195 g/m ²	(EN ISO 2795)
Bending stiffness	MO: 44000 Nm/m CO: 21600 Nm/m	(EN ISO 8603)

**Frequently Asked Questions (FAQs):
Updated UNICEF Packing Specifications (2023)**

Quality instructions

Min. 90% of resulting box strength must be maintained in tropical conditions, i.e. 40°C and 90 % R.H. Box compression test (BCT) must be provided.

Any exception to the Packing Specifications must first be agreed with the consignee and then flagged in the Purchase Order document.

Q6: Will you accept larger pallets / crates than those mentioned in the Specifications?

A6: No. The allowable pallet dimensions are non-negotiable. Our main warehouse in Copenhagen is automated and will reject any pallets which are not standard US or EUR pallets and exceed a height of 1100mm. The rest of our global warehouses have selective racking which is pre-configured for this specific pallet height.

Any non-conforming materials (large tents, refrigerators, generators, etc.) must be stored in the bulk areas of our warehouses.

A supplier may be issued an exemption if they can prove that their materials cannot fit within the pre-defined maximum allowable palletization dimensions (1000mm x 1200mm x 1100mm).

Any exception to the Packing Specifications must first be agreed with the consignee and then flagged in the Purchase Order document.

Q7: Can we use corner boards, edge protectors, and top caps made of solid board instead of corrugated fiberboard?

A7: Yes. This is acceptable if the solid board is made of recyclable material.

Q8: Can we use transparent Stretch Wrap that is 500mm wide instead of 450mm wide?

A8: Yes. Using stretch wrap that is 500mm wide is acceptable.

Q9: Is stretch wrapping mandatory if polypropylene straps are used?

A9: For standard-sized pallets, stretch wrapping is mandatory. If polypropylene straps are used, it's still advisable to have stretch-wrapping for added protection during transit and storage.

Any exception to the Packing Specifications must be flagged in the Purchase Order document.

Q10: Can we use a pallet size of 1150x800mm instead of the requested 1200x800x1100mm?

A10: Any deviation from the packing specification must first be approved. Please provide additional information, including photos and proof of compatibility with standard selective racking systems.

Any exception to the Packing Specifications must be flagged in the Purchase Order document.

Q11: Can we continue using PET strapping instead of polypropylene strapping for pallets?

A11: No. This is not compliant with our Packing Specifications. Any remark will incur fines.

7. Pre-Approval and Penalties

- Suppliers should submit label samples before packing and shipping.
- Financial penalties for non compliance are listed on UNICEF's Website
 - Same costs retained.
- Label templates provided.

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A7 labels

TAASTRUP,
DENMARK

Arial Font, Size 8 → QUANTITY **100**

Arial Font, Size 12 → EXPIRY **27-Sep-2026**

BATCH/LOT
123ABC

PROD DATE
27-Sep-2023

UNICEF MATERIAL DESCRIPTION
**MULTIVITAMIN & MINERAL
TABLETS/BOT-100**

CUST PART NO. **S1572013** ORDER NUMBER **56434740-016**

Arial Font, Size 8 →

(00) 123ABC
(10) 260927
(11) 230927
(02) 100
(241) S1572013
(400) 56434740-016

SUPPLIER NAME ORIGIN ADDRESS

GTIN **30123456789013** QUANTITY **115**

SERIAL NUMBER **ABC9876543211234**

CONTENT **23445670000003** EXPIRY **22-Mar-2026**

BATCH/LOT **AE12344** PROD DATE **1-Sep-2022**

UNICEF MATERIAL DESCRIPTION
PARACETAMOL 500MG TABS/PAC-100

CUST PART NO. **S1555964** ORDER NUMBER **68006879-10**

Reduce to "1"

Remove these

Both (02) and (37)

(01) 30123456789013
(21) ABC9876543211234
(10) AE12344
(17) 260322
(11) 220901
(02) 23445670000003
(37) 115
(241) S1555964
(400) 68006879-10

unicef-my.sharepoint.com/personal/padler_unicef_org/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fpadler_unicef_org%2FDocuments%2FUNICEF%2F...
 WH stock composi... Inbound PO Volum... SD Warehouse Plan... Supply Chain Dash... UAE Hub SharePoint Hubs Mgmt ShareP... UNHCR Stockpile...
 Download UNICEF GS1 Label Temp...zip

UNICEF GS1 Label Templates (NiceLabel 10).zip > UNICEF GS1 Label Templates (NiceLabel 10)

...	Name	Date Modified	File Size
	A6 Label Template for Pallets_Batch-Managed materials.nlb	2023-09-18	12.7 KB
	A6 Label Template for Pallets_Non Batch-Managed material	2023-09-18	11.8 KB
	A7 Label Template for Cases_Batch-Managed materials.nlb	2023-09-18	12.7 KB
	A7 Label Template for Cases_Non Batch-Managed material	2023-09-18	10.7 KB
	A7 Label Template for Cases_SGTIN Serialized materials.nlb	2023-09-19	12.4 KB
	Database Template for UNICEF Labels.xlsx	2023-09-20	77.2 KB

8. Pre-Approval and Penalties

Table 1. GS1 Application Identifiers to be used on UNICEF labels

GS1 AI	GS1 Description (Click hyperlink)	Format	UNICEF Label Data Title Text	UNICEF Labelling requirement	UNICEF usage	Which UNICEF Labels?
00	Serial Shipping Container Code (SSCC)	N2+N18	SSCC	- Mandatory for Medicines, Medical Devices and IT equipment. - Optional for all other products	GS1 compliance	PALLET, CASE1,
01	Global Trade Item Number (GTIN)	N2+N14	GTIN	- Mandatory for Medicines, Medical Devices and IT equipment. - Optional for all other products	GS1 compliance	SALES UNIT ONLY
02	Global Trade Item Number (GTIN) of contained trade items	N2+N14	CONTENT	- Mandatory for Medicines, Medical Devices and IT equipment. - Optional for all other products	GS1 compliance	PALLET, CASE1, CASE2
10	Batch or lot number	N2+X..20	BATCH/LOT	- Mandatory for Batch Managed Materials - Not required for all other products Maximum of 10 characters allowed	Traceability of batch managed goods	PALLET, CASE1, CASE2
11	Production date (YYMMDD)	N2+N6	PROD DATE	- Mandatory for Batch Managed Materials - Not required for all other products	Traceability of batch managed goods	PALLET, CASE1, CASE2
17	Expiration date (YYMMDD)	N2+N6	EXPIRY	- Mandatory for Batch Managed Materials - Not required for all other products	Traceability of batch managed goods	PALLET, CASE1, CASE2
21	Serial number	N2+X..20	SERIAL NUMBER	- Mandatory for Medicines, Medical Devices and IT equipment. - Optional for all other products	Traceability	CASE2
37	Count of trade items or trade item pieces contained in a logistic unit	N2+N..8	QUANTITY	Mandatory for all goods - Supplier to use the quantity based on the UNICEF Unit of Measure from the PO	Traceability	PALLET, CASE1, CASE2
241	Customer part number	N3+X..30	CUST PART NO.	Mandatory for all goods - Supplier to use the UNICEF material number from the PO	Traceability	PALLET, CASE1, CASE2
400	Customers purchase order number	N3+X..30	ORDER NUMBER	Mandatory for all goods, the PO number and PO item number must be concatenated together and encoded: "68XXXXXX-XXX"	Traceability	PALLET, CASE1, CASE2
N/A	N/A	X40	UNICEF MATERIAL DESCRIPTION	Mandatory for all goods - Supplier to use same wording as used in the UNICEF PO	Traceability	PALLET, CASE1, CASE2

UNICEF Re-work fees

Re-work undertaken	Cost in USD	Details
Palletization of 40' container	\$4,500	The cost of palletization includes: wooden pallets, plastic wrapping, pallet labels, moving container from UNICEF, moving pallets back to UNICEF, and labour. Additional costs may be incurred if storage/demurrage is accrued during the palletization period and will be invoiced separately.
Palletization of 20' container	\$2,600	
Repalletization per pallet	\$120	The cost of repalletization includes wooden pallets, plastic wrapping, pallet labels and labour.
Repacking of cartons per carton	\$50	The cost of repacking includes cardboard cartons, strapping tape, carton label and labour.
Wrapping or rewrapping of the pallet	\$25	The cost of wrapping includes removal of the loose plastic foil, disposal of the waste and wrapping with the new plastic foil.
Missing or incorrect labels - per label	\$10	The cost per pallet would be USD 20 to

<https://www.unicef.org/supply/technical-specifications-packing-packaging-and-labelling>

9. Conclusion

- Updates will be enforced for all POs placed after **02 October 2023**
- Full adaptation is expected by **June 2024**
- Full GS1 implementation for all Suppliers to be further explored at a later date.



Q&A



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Thanks!