



# GS1 standards enabling traceability in the food supply chain

Information Flow

Foundational: Collection of master data such as product information and location identification of trading partners in the supply chain

Other transactional and events-based traceability data

GTIN + Lot (raw materials)
Date + time
GLN of farm
Produced (biz step)

GTIN + Lot (final product)	SSCC
Date + time	Date + time
GLN of plant	GLN of shipping area
Produced	Packed

SSCC	SSCC
Date + time	Date + time
GLN of warehouse/DC	GLN of warehouse/DC
Delivered	Shipped

GTIN + Lot	GTIN + Lot
Date + time	Date + time
GLN of retail store	GLN of retail store
Received and stored	Sold to customer

Physical Flow

## Grower/Supplier

**LOCATION IDENTIFICATION**  
Global Location Number  
9504000059361

**CASE LEVEL IDENTIFICATION**  
(carton boxes)  
Global Trade Item Number and Traceability Data  
Date + Batch/Lot  
9504000059378

- GTINs + batch/lot are used to identify produce in cases/bulk.
- SSCCs are used for products distributed from the farms with batch/lot information.
- Each physical location is identified with a GLN.

## Manufacturer

**COMPANY & LOCATION IDENTIFICATION**  
Global Location Number  
9506000111148

**TRADE ITEM IDENTIFICATION**  
(final product)  
Global Trade Item Number and Traceability Data  
Date + Batch/Lot  
9506000111155

**CASE LEVEL IDENTIFICATION**  
(carton boxes)  
Global Trade Item Number and Traceability Data  
Date + Batch/Lot  
9506000111179

- Internal traceability is maintained in the key processes: receiving, transformation of raw materials to semi-finished or finished goods, storage and distribution.
- GTINs and production data (batch/lot & expiry date) are printed on products to be despatched.
- Links between goods received and despatch of final product are always maintained through the GTINs and batch/lot numbers.

## Warehouse/Distribution Centre

**COMPANY & LOCATION IDENTIFICATION**  
Global Location Number  
9506000111247

**PALLET LEVEL IDENTIFICATION**  
Global Serial Shipping Container Code (received from manufacturer)  
095060001111000017

**PALLET LEVEL IDENTIFICATION**  
Global Serial Shipping Container Code (after aggregation/disaggregation)  
095060001112000016

- Internal traceability is maintained in the key processes: receiving, cross-docking, storage and distribution.
- GTINs + batch/lot or expiry date is used to assure accuracy of picked products when aggregated and disaggregated. These cases are linked and tracked with pallet using the SSCC.
- Despatch Advice containing GTINs, SSCC and GLNs is sent to customers.

## Retailer

**COMPANY & LOCATION IDENTIFICATION**  
Global Location Number  
9506000111391

**CASE LEVEL IDENTIFICATION**  
(carton boxes)  
Global Trade Item Number and Traceability Data  
Date + Batch/Lot  
9506000111179

**TRADE ITEM IDENTIFICATION**  
(final product-at POS)  
Global Trade Item Number and Traceability Data  
Date + Batch/Lot  
9506000111155

- Retailers provide product information to their customers at POS.
- Master data and event data (for traceability purposes) can be provided to consumers on product labels or through scanning of barcodes.

Note: All GS1 keys are available in a barcode format. All GS1 key numbers highlighted above are for illustration purposes only and should not be used within an actual operation.