GS1 US

The Global Language of Business

GS1 US University
Getting Started with GS1 US

An Introduction to Product Identification

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Just a Few Items

- Phones are in listen only mode

- Please type questions in the "Questions" panel

- This session is also available for playback in the GS1 US Learning Management System (LMS)

  - Visit http://gs1us.xceleratemedia.com/login/ to create a complimentary account

- A link to the presentation material can be found in the reminder email and here - www.gs1us.org/getstartedwebinar

Antitrust Caution

GS1 US is committed to complying fully with antitrust laws.

We ask everyone to refrain from discussions in areas of antitrust such as pricing, deal-making, selling, promoting, or other activities which could be viewed as anti-competitive.

If anyone believes the discussion is approaching these boundaries, please inform a GS1 US representative.

Please remember to make your own business decisions and that all GS1 Standards are voluntary and not mandatory.

Please review the complete GS1 US antitrust policy at:
http://www.gs1us.org/gs1-us-antitrust-compliance-policy

Getting Started with Product Identification

Agenda

- GS1 US / Why Standards
- GS1 US Membership
- GS1 Company Prefix
- Building Your UPC-A Barcode
  - Global Trade item Number (GTIN)
- Basic GTIN Assignment
- Resources
- GS1 US Data Hub | Product ®
  - How to Access
  - Help Resources Available
- Q/A

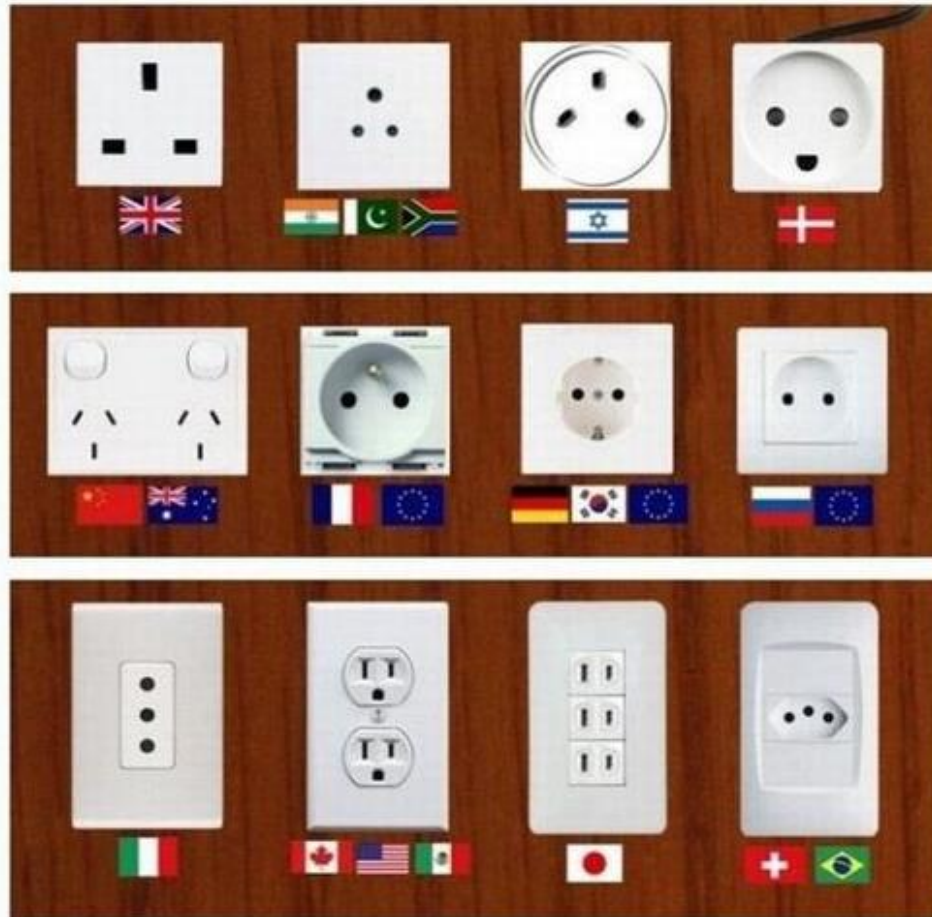# 110+ Member Organizations
Serving Business Around the World

2 million + companies world wide use GS1 Standards

6 billion barcodes scanned daily

40+ years - GS1 US pioneer of UPC-barcode

When There is no Global Standard….

The Global Language of Business

GS1 Standards

Identify GS1 Identification Numbers
Companies, Products, Locations,
Logistics, Assets, and Services

Capture GS1 Data Carriers
Barcodes and EPC-enabled RFID

Share GS1 Data Exchange
Master Data, Transactional Data,
and Physical Event Data

GS1 US Membership

GS1 US is a user-driven membership organization that came together more than 40 years ago with the introduction of the U.P.C. barcode. You become a member when…

- **License a GS1 Company Prefix** as the first step in creating standardized product identification numbers and U.P.C. barcodes.

- **Join a GS1 US Industry Initiative** to help develop solutions to industry challenges through the use of GS1 Standards.

- **Become a GS1 US Solution Partner** to join a select group of companies that, as GS1 Standards Professionals, can help industry implement GS1 Standards.

Member Benefits

- **Get Started Roadmap**
- **Get Started Webinars**
- **Webinars and Industry Calls**
- **Learning Management System**
- **Reference Library**
- **E Commerce Documents**
  - **All versions of EDI**
  - **EANCOM**
  - **Link to GS1 XML message standards and schema**
- **Call Center Support**
- **Industry Pages**
- **Resource links and Case Studies**
- **Industry Calls**
- **GS1 US Data Hub®**

Accessible through myGS1 US, Industry Pages, and Industry Collateral

Classroom, On-line and Self-Help

Your Licensed
GS1 Company Prefix

Understanding the Company Prefix

If your U.P.C. Company Prefix is...	You can create this many U.P.C. Barcodes...
6-digits	100,000
7-digits	10,000
8-digits	1,000
9-digits	100
10-digits	10

Sample Company Prefix Certificate

GS1 US GEPIR – Search by Company Name

http:/gs1us.org/gepir

Overview of GTIN
(Global Trade Item Number)

What is a Trade Item?

Any item (product or service) upon which there is a need to retrieve pre-defined information and that may be priced, ordered, or invoiced at any point in any supply chain.

1 Product = 1 GTIN

KODABAR

8 62283 00001 2

8 62283 00003 ~~8~~

8 62283 00008 1
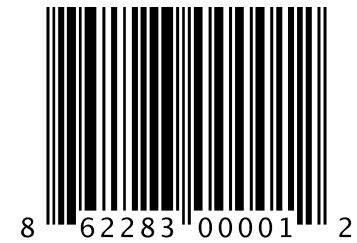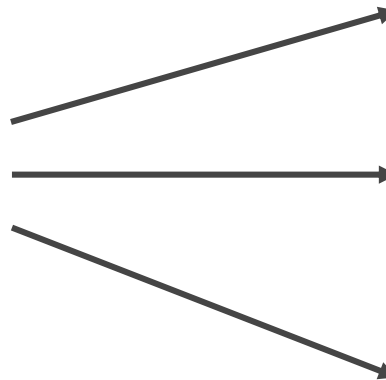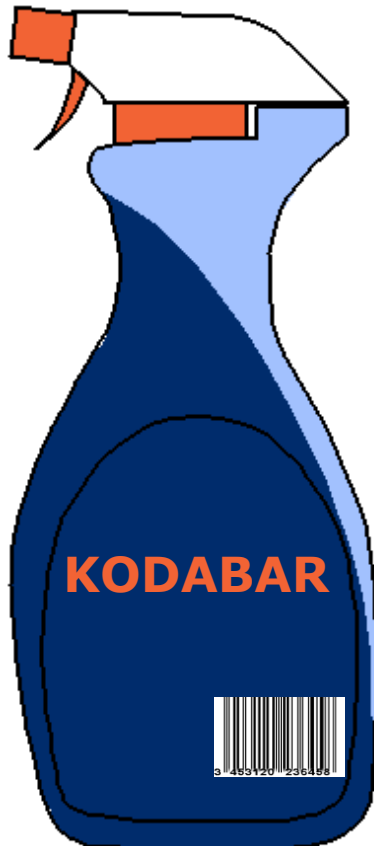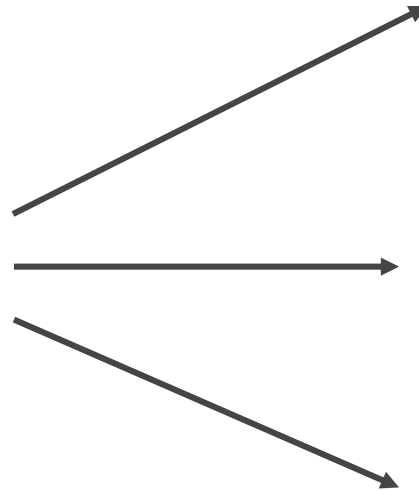
1 GTIN = 1 Product

Building your Product Identification GTIN-12 in a UPC-A Barcode

GTIN-12 in UPC-A Barcode

Point of Clarification

◄······· **Data Carrier (UPC-A Barcode)**

◄·········**Data Structure (GTIN-12)**

GTIN-12 Structure

Step 1

U.P.C. Company Prefix licensed by GS1 US is the first and constant element

A unique number licensed to a company by GS1 US

Variable from 6 to 10 digits

Step 2

Item Reference is assigned by you to each specific product

Variable from 1 to 5 digits, depending upon the length of your Company Prefix

Step 3

Check Digit is always the last digit of GTIN®

Calculated from all the other numbers and guarantees your GTIN has been accurately created

Step 1: The U.P.C. Company Prefix

- Licensed to a company by GS1 US
- Vary in Length (6 – 10 digits)

Company A

Company B

8 62283 00008 1

0 13670 00000 3

Step 2: Item Reference

- The Item Reference is variable from 1 to 5 digits, depending upon the length of your Company Prefix

- Sequentially assigned number to each of your specific product

Company A

Company B

8 62283 00008 1

0 13670 00000 3
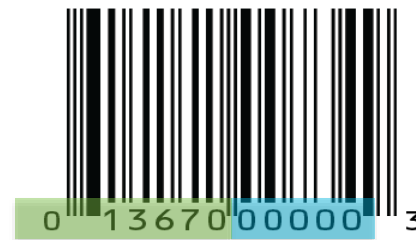
Step 3: Calculate the Check Digit

- Always the last number of your GTIN-12
- Modulo 10 calculation that ensures the integrity of your GTIN-12

Company A

8 62283 00008 1

Company B

0 13670 00000 3
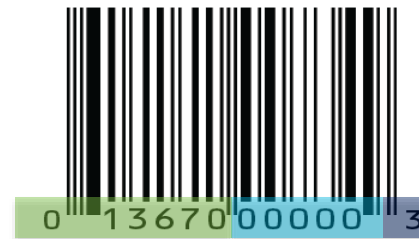
Step 3: Calculate the Check Digit
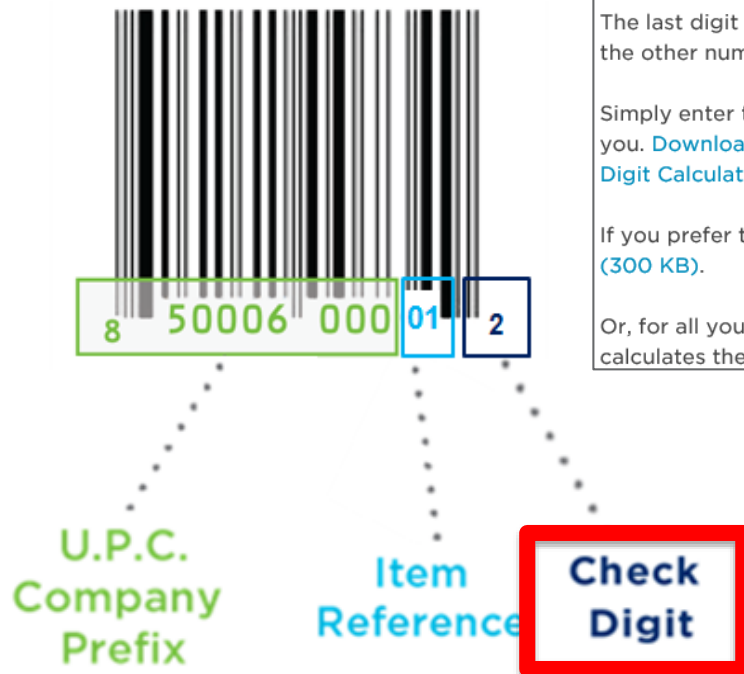
Check Digit Calculator

The last digit of a barcode number is a calculated check digit. The check digit is calculated from all the other numbers in the barcode and helps to confirm the integrity of your barcode number.

Simply enter the ID Number below and the Check Digit Calculator will calculate the last digit for you. Download and view these PDF instructions about the ID number and how to use the Check Digit Calculator.

If you prefer to calculate the check digit on your own, download and read these PDF instructions (300 KB).

Or, for all your barcode needs, use our online barcode creation tool, GS1 US Data Hub° | Product. It calculates the check digit automatically.

8 50006 000 01 2

U.P.C. Company Prefix

Item Reference

Check Digit

	ID Number	Check Digit		
GTIN-12			Calculate	Clear

http://gs1us.org/checkdigit

Capacity = How Many U.P.C. Barcodes

If your U.P.C. Company Prefix is...	You can create this many U.P.C. Barcodes...	Your Item Reference is...	Your Item Reference Numbering is...
6-digits	100,000	5-digits	00000 - 99999
7- digits	10,000	4-digits	0000 - 9999
8-digits	1,000	3-digits	000 - 999
9-digits	100	2-digits	00 - 99
10-digits	10	1- digit	0 - 9

8 50006 000 01 2

U.P.C. Company Prefix — Item Reference — Check Digit
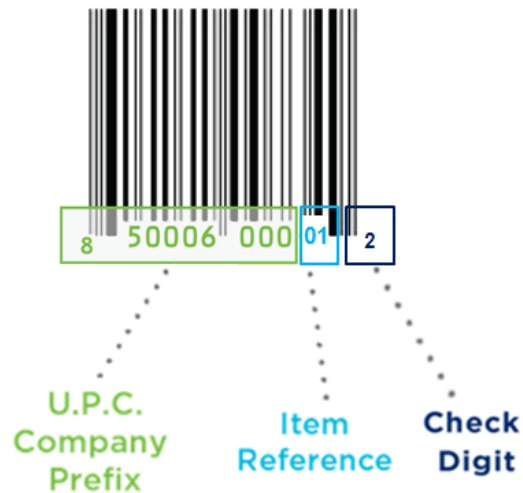
Unique Device Identification (UDI)

What is a UDI?

- Code on the device label, packaging or product, in both easily readable plain-text and automatic identification and data capture (AIDC) format

- **Two parts : UDI = DI+PI**

  - **Device Identifier (DI)** (static) – specific to a device version or device model

  - **Production Identifier(s) (PI)** (dynamic) – one or more currently used control/production information, such as lot/batch, serial number, manufacturing date, expiration date

UDI = Unique Device Identification

UDI Compliant Barcode Examples

0 30404 01234 7

(01) 0 0030404 012347 (10) A1345B

(01) 1 0030404 012344 4
(10) B9874C

(01) 1 0030404 012344 4 (10) B9874C

(01) 2 0030404 012341
(10) EQ4592M

(01) 2 0030404 012341 (10) EQ4592M

Basic GTIN Assignment

Assigning Unique Numbers - Colors

Assigning Unique Numbers - Size

Medium

6 1 4 1 4 1 0 0 0 0 3 6
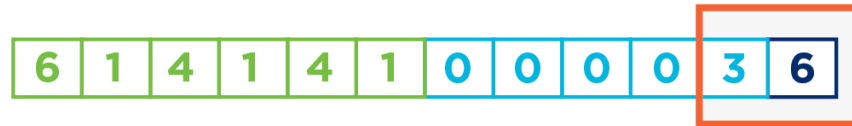
Large
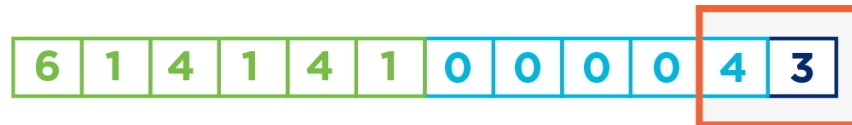
6 1 4 1 4 1 0 0 0 0 4 3

Assigning Unique Numbers - Variation

| 6 | 1 | 4 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 5 | 0 |

| 6 | 1 | 4 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 6 | 7 |

| 6 | 1 | 4 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 7 | 4 |

In Summary
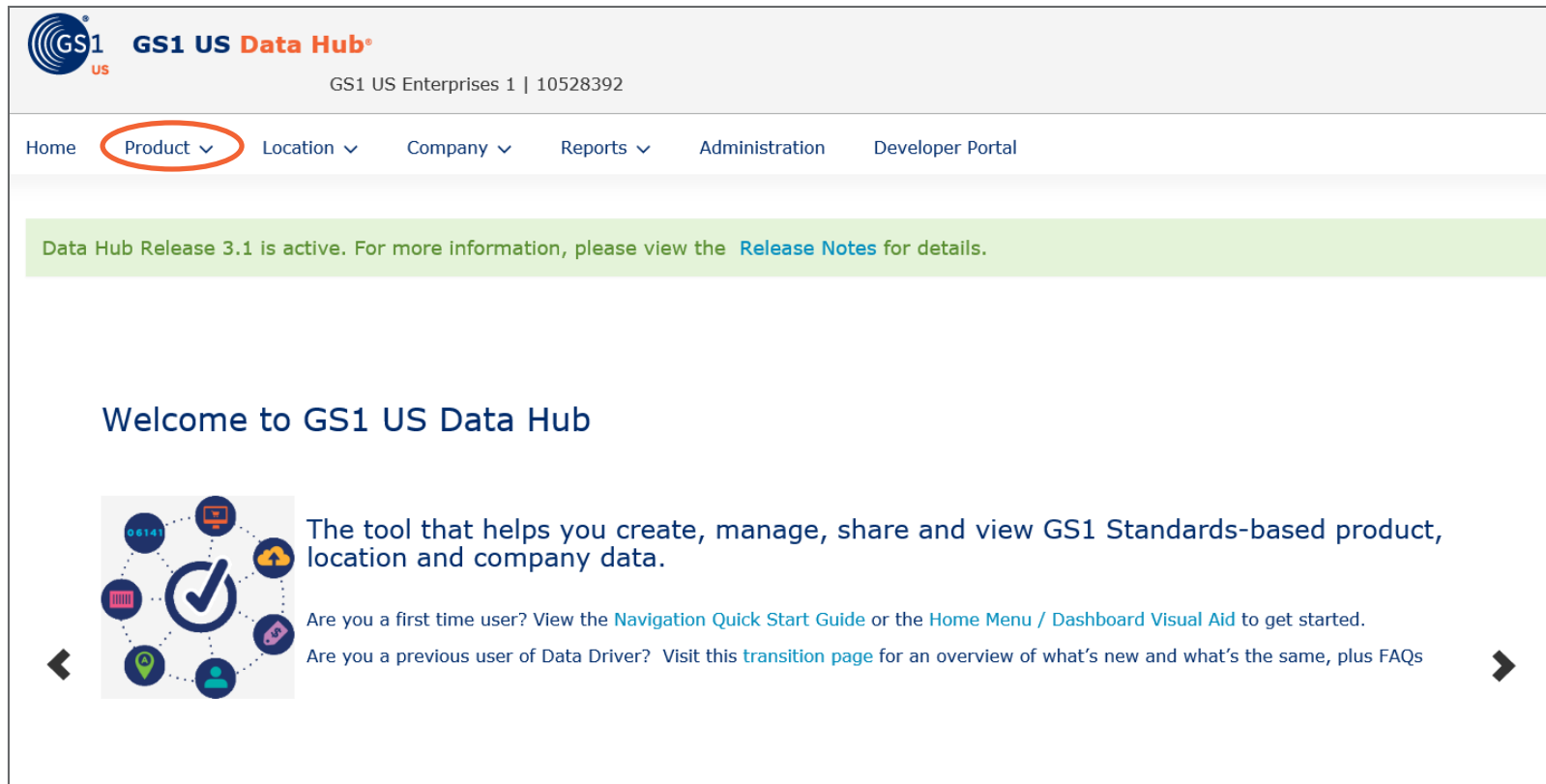
- U.P.C. Company Prefix – 6-10 digits
- Item Reference – 1-5 digits
- Check Digit – last digit
- GTIN structure – 12 digits for a UPC-A
- Each color, size, and package variation requires a unique GTIN-12

GS1 US Data Hub | Product

How to Access and Where to Find Help Resources

GS1 US Data Hub | Product

https://dh.gs1us.org/

Help Resources

GS1 US Data Hub | Product Training Opportunities

Access recorded on-demand training here.

Previously Recorded Webinar: Overview of GS1 US Data Hub | Product

$79.00

Potential Next Steps…

Get Started Guide

Get Started Guide steps to U.P.C.s and barcodes:

1. Get a GS1 US-Issued Company Prefix
Your company ID for building barcodes, U.P.C.s, GTINs, and other product identifiers.
View Step 1 >

GS1 Company Prefix

2. Choose Product (GTIN) or Location (GLN) Identification
Identifying a product? Location? Learn how.
View Step 2 >

GTIN

GLN

3. Determine Barcode Type
Find barcode options based on your needs.
View Step 3 >

4. Place Barcodes on Products
Tips for creating and placing barcodes on your products.
View Step 4 >

5. Test/Verify Printed Barcodes
Make sure they work the first time, every time.
View Step 5 >

6. Share Information Electronically
Learn how to share your information with your trading partners.
View Step 6 >

https://www.gs1us.org/upcs-barcodes-prefixes/get-started-guide

GS1 US University

GS1 US University

Take your GS1 Standards knowledge to a new level

Businesses seek flexible, convenient, and focused educational opportunities to address their unique learning objectives. To meet this need is the mission of the GS1 US University. GS1 US University is the place to learn more about the use, adoption, and implementation of GS1 Standards. Through certificate courses, workshops, and both live and on-demand educational webinars, GS1 US University can help you understand how to use GS1 Standards to help innovate, operate more efficiently, and build capabilities that drive your business.

Learn how to move your business forward with GS1 Standards and GS1 US University.

GS1 US Certificate Courses and Classroom Events

Become the GS1 Standards expert for your organization by participating in one of our interactive, instructor-led classroom events. Attend a certificate course and learn how to identify products, improve business processes, and reduce costs using GS1 Standards or attend a workshop around Medical Devices Identification (UDI), Data Quality, Supply Chain Visibility, and more.

View upcoming classroom events >

Live Educational Webinars

Learn from GS1 Standards experts about topics including the GS1 Company Prefix, identifying your products with GTINs, barcoding your products, sharing data using the GDSN, and more. By attending, you'll have the opportunity to ask the webinar leaders topic-specific questions related to your business.

View all webinars >

Online Training Courses

Want to learn about GS1 Standards at your own pace any time of day or night? Access our library of educational videos and interactive modules through our Learning Management System and set up your own learning paths.

Learn More >

GS1 US Badge Program - Your GS1 Standards Credentials

When you successfully complete a GS1 US certificate course, you can earn an important credential in the use of GS1 Standards—and now you can add this new skill to your online resume with a GS1 US Badge and share it via social media.

To learn more about our new badging program, click here.

Upcoming Educational Offerings

https://www.gs1us.org/education-training/events

Questions?

Thank You!

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OF BUSINESS

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Appendix:
Available Resources

Solution Partners

Connect with proven solution providers that can deliver services and solutions that enable quick, efficient, and accurate standards implementation.

https://www.gs1us.org/tools/solution-provider

On-line Courses

myGS1 US Member Site Login

myGS1 US Content

Important: Keep your Company Profile Information Current

Useful Healthcare Resources

- UDI Information:
  - https://www.gs1us.org/industries/healthcare/standards-in-use/udi
- DSCSA Information:
  - https://www.gs1us.org/industries/healthcare/standards-in-use/dscsa
- GS1 Healthcare GTIN Allocation Rules:
  - http://www.gs1.org/docs/gsmp/healthcare/GS1_Healthcare_GTIN_Allocation_Rules.pdf
- Implementation Resources:
  - https://www.gs1us.org/industries/healthcare/implementation-resources

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