

GS1 IN EUROPE REGIONAL FORUM



23 - 26 October 2023 Athens, Greece



GLOBAL PRODUCT CLASSIFICATION

Masterclass



GS1 Competition Law Caution

- GS1 operates under the GS1 Competition Law Caution. Strict compliance with competition laws is and always has been the policy of GS1.
- The best way to avoid problems is to remember that the purpose of the group is to enhance the ability of all industry members to compete more efficiently.
- This means:
 - **There shall be no discussion of prices, allocation of customers, or products, boycotts, refusals to deal, or market share**
 - If any participant believes the group is drifting toward impermissible discussion, the topic shall be tabled until the opinion of counsel can be obtained.
- The full caution is available via the link below, if you would like to read it in its entirety: <http://www.gs1.org/gs1-competition-law-caution>



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ETIQUETTES ...

IN-PERSON
USE MICROPHONE
FOR QUESTIONS

ONLINE
PLEASE STAY MUTED
RAISE HAND OR USE
CHAT FOR QUESTIONS

FOR ALL
ENJOY THE SESSION &
THE REGIONAL FORUM

THE SLIDE DECK AND THE RECORDING OF
THE SESSION WILL BE SHARED AFTERWARDS

Masterclass: Global Product Classification



Agenda

1

Global Product Classification Interactions and usage

Robert Beideman
GS1 Global Office

2

Global Product Classification overview

- GPC Browser and GPC Translation Tool
- GPC Publications

Elsa Braz
GS1 Global Office

3

GPC Modernization

- Challenges in the near food sector and how move forward (COOP use case)

Cornelia Willutzki
GS1 Switzerland

4

Impact of GPC in Analytics

- Data Coverage

Paulo Barata
GS1 Global Office



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Robert Beideman,
Chief Product Officer
GS1 Global Office



Masterclass: Global Product Classification Interactions

GDSN

A service to share B2B data with your trading partners



Verified by GS1

A service to get product identity right



Global Data Model

A service that helps leverage product content



GS1 Activate

A service to make it easy to put a barcode on your products



Data Quality

A service to improve the quality of the data



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Elsa Braz,
Global Standards Manager
GS1 Global Office



Masterclass: Global Product Classification Overview

GS1 Global Product Classification (GPC) Standard

GS1 Global Product Classification (GPC) is a **system** that allows **buyers** and **sellers** to **communicate** more efficiently.

The GPC Standard offers a **universal set of rules** to allow the use of common terminology for **grouping products**.

It ensures that **products** are **classified** correctly and **uniformly**, everywhere in the **world**.



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Masterclass: Global Product Classification Overview

- The GPC Schema is organised with the aim to establish a flexible product classification schema, based on a comprehensive set of rules.
- The GPC schema hierarchy provides a coherent, logical, and intuitive grouping that can be used to classify comparable products in a global environment.
- The foundation of GPC is called "Brick". GPC bricks define categories of similar products. Using the GPC brick ensures the correct recognition of the product category across the extended supply chain, from seller to buyer.



The GS1 Global Product Classification (GPC) standard helps global trading partners to group products in the same way, everywhere in the world. The resulting common business language is clear and instantly understandable.



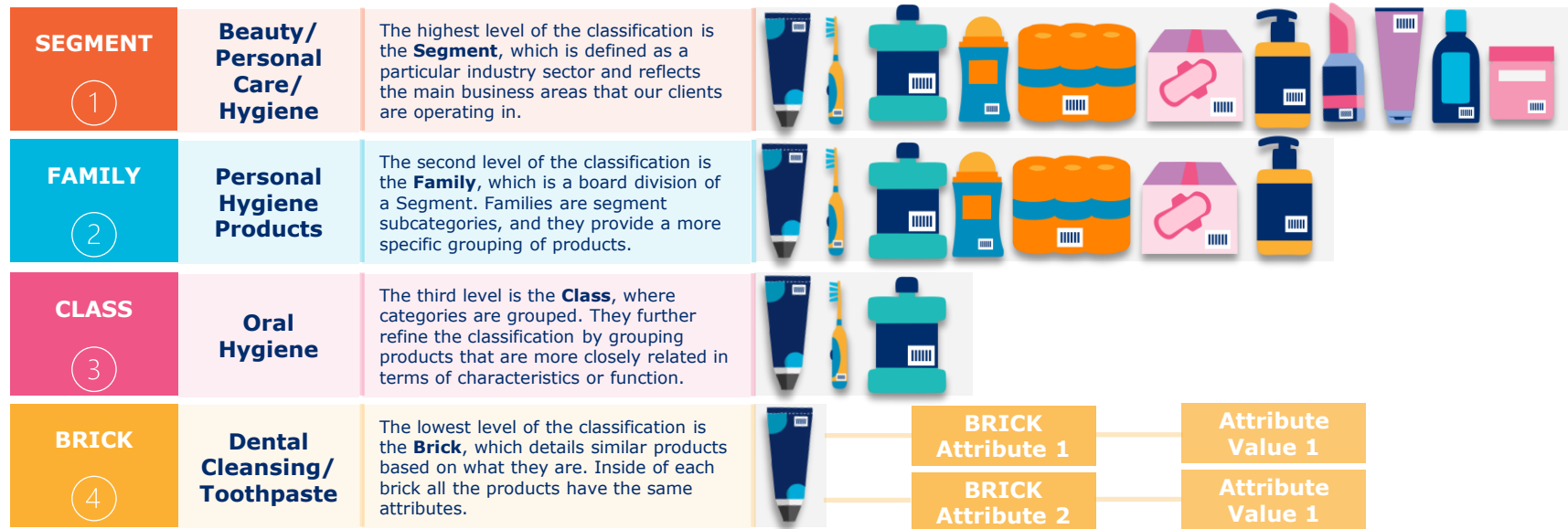
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Masterclass: Global Product Classification Hierarchy

- The Global Product Classification is a rule-based, four-tier classification system for grouping products.

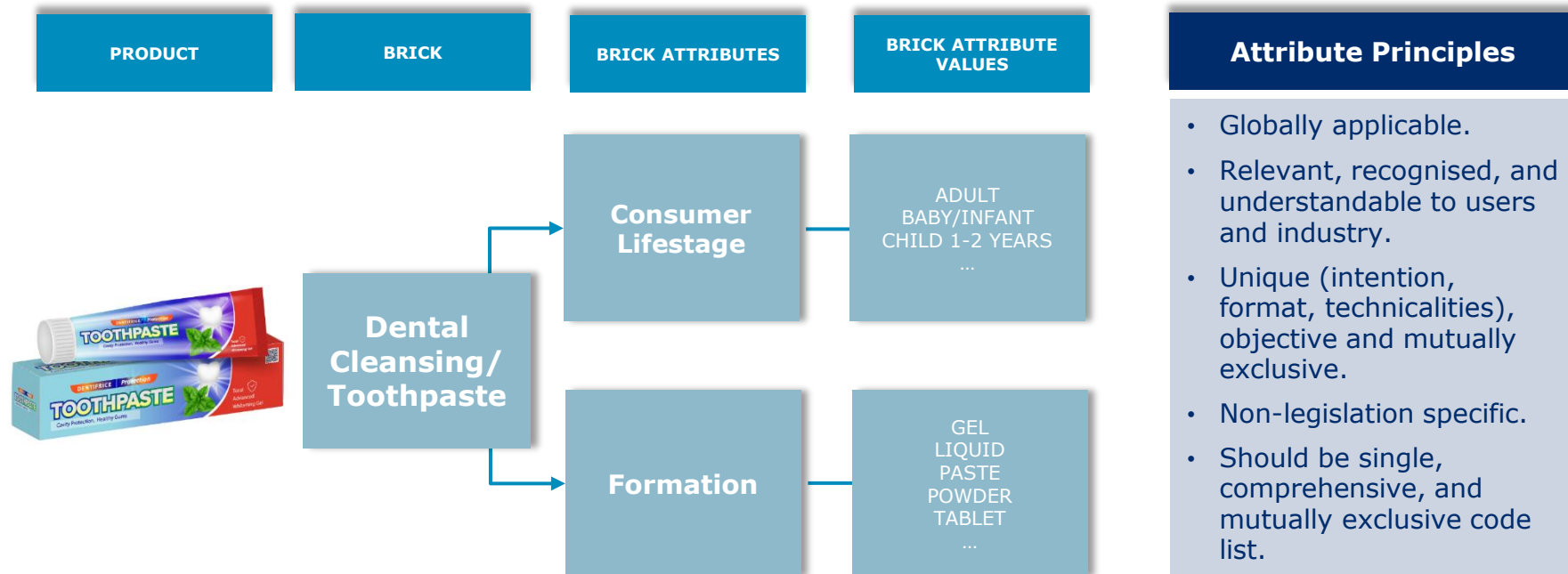


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Masterclass: Global Product Classification Hierarchy

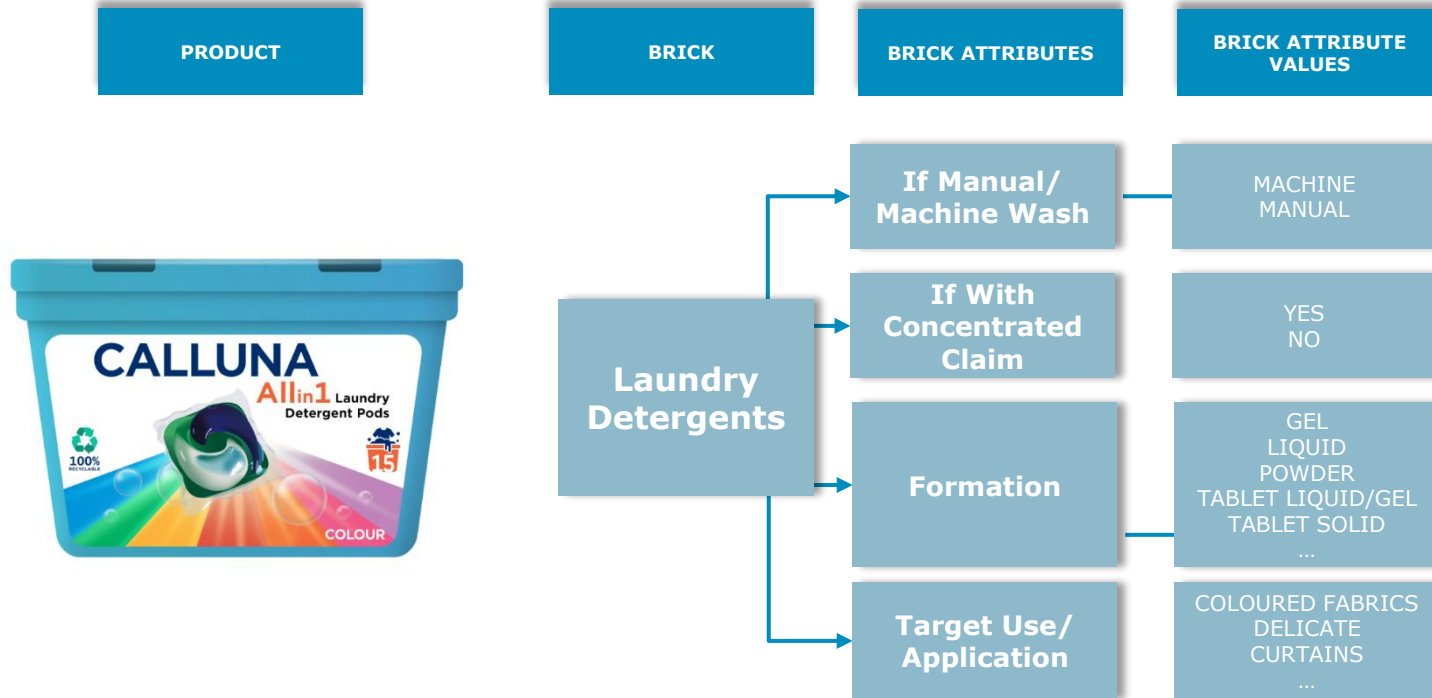


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Masterclass: Global Product Classification Hierarchy



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Masterclass: Global Product Classification Structure

- Codes structure are linked to the Segment/Family/Class hierarchy, whereas the GPC Brick, Attribute Type and Attribute value are standalone.
- Brick Codes are not reused. Once a code is allocated it becomes unavailable for reissue. Deleted codes are not deleted from the database but flagged as “deactivated.”

Level	Length	Example	Syntax
SEGMENT	8	10000000	Two-digit Code followed by six zeros
FAMILY	8	10200000	Two-digit Code preceded wit the Segment Code
CLASS	8	10203000	Two-digit Code preceded wit the Family Code
BRICK	8	10000123	Preceded with a “1”
ATTRIBUTE TYPE	8	20000123	Preceded with a “2”
ATTRIBUTE VALUE	8	30000123	Preceded with a “3”

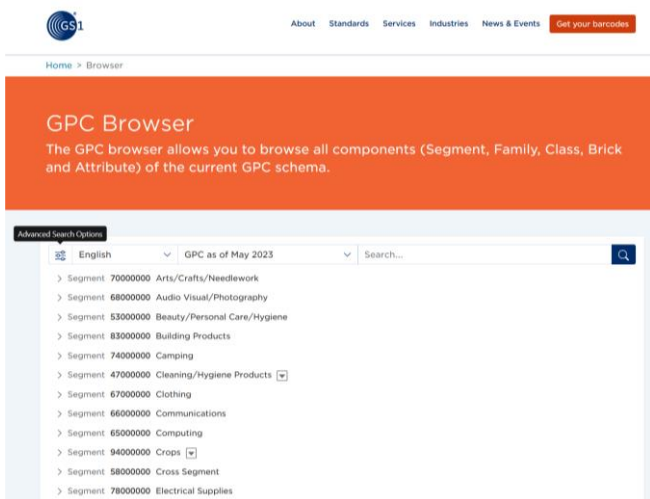


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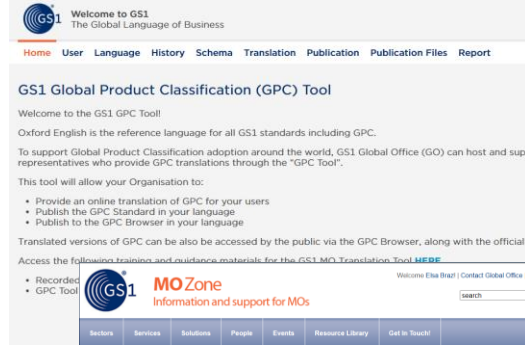
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Masterclass: Global Product Classification Tools



The screenshot shows the GPC Browser homepage. At the top, there's a navigation bar with links: About, Standards, Services, Industries, News & Events, and a button 'Get your barcodes'. Below this, a large orange banner contains the text 'GPC Browser' and 'The GPC browser allows you to browse all components (Segment, Family, Class, Brick and Attribute) of the current GPC schema.' Below the banner is a search bar with 'Advanced Search Options' and a dropdown menu showing a list of segments with their corresponding counts and names, such as 'Segment 70000000 Arts/Crafts/Needlework'.



The screenshot shows the GS1 Global Product Classification (GPC) Tool homepage. It features a navigation bar with links: Home, User, Language, History, Schema, Translation, Publication, Publication Files, and Report. The main content area includes a welcome message, a list of features (Provide an online translation of GPC for your users, Publish the GPC Standard in your language, Publish to the GPC Browser in your language), and a section for translated versions of GPC accessible via the GPC Browser.



The screenshot shows the Global Product Classification (GPC) homepage. It has a navigation bar with links: About, Standards, Services, Industries, Insights & Events, and a button 'Get your barcodes'. The main content area features a large blue banner with the text 'Global Product Classification (GPC)'.

GPC classifies products by grouping them into categories based on their essential properties as well as their relationships to other products. GPC offers a universal set of standards for everything from a car to a litre of milk, and for everything from camping equipment to footwear, home and appliances to toys.

How GPC works →

Latest news!

The new GPC Browser has arrived! Please preview the new search service below:

[gpc-browser.gs1.org](https://www.gs1.org/gpc-browser)

Find the GPC User Guide here →

Watch the GPC Browser training video here →

New features include:



Find out more

Organisation for Economic Co-operation and Development (OECD) uses GPC for their GlobalRecalls Portal

Washington State's Department of Ecology uses GPC for Children's Safe

<https://www.gs1.org/standards/gpc>



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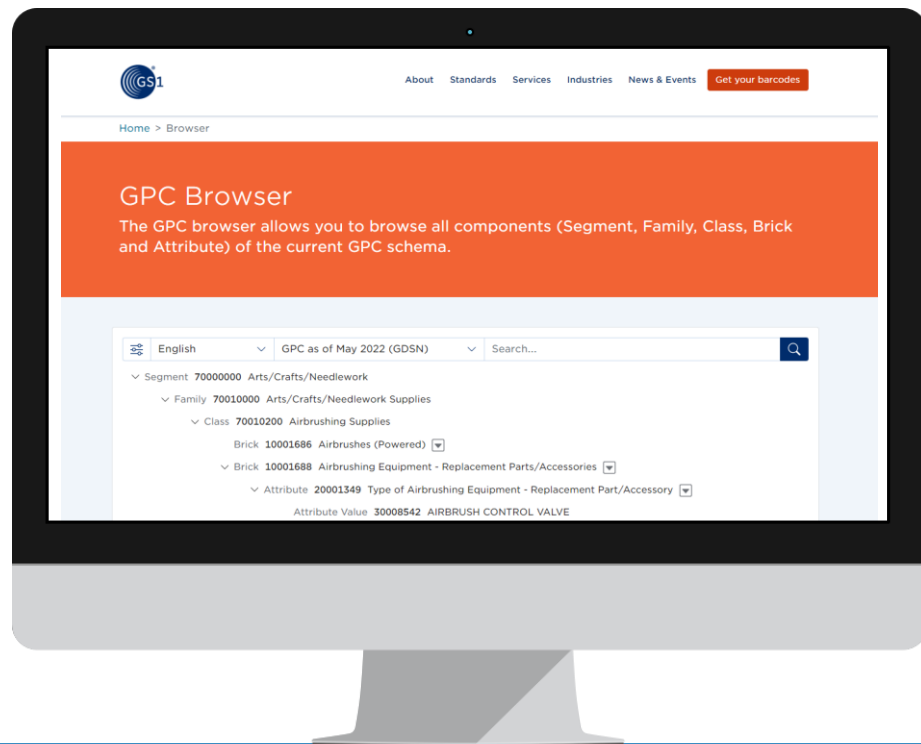
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Masterclass: Global Product Classification Tools

The new **GPC browser** provides improved search functionality to easily classify products into a GPC category (in the official Oxford English version and all translated languages).

The public access to the GPC standard online allows users to browse all components of the Standard including Segment, Family, Class, Brick and Attributes/Attribute Values with one search!



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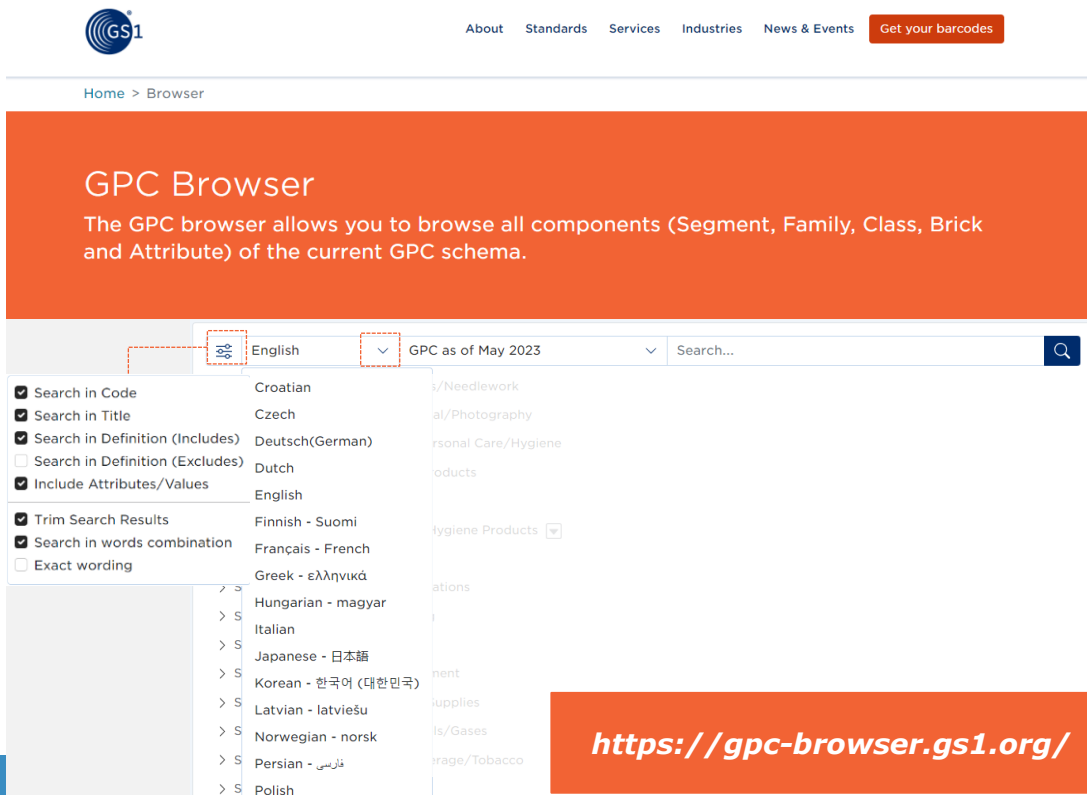
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Masterclass: Global Product Classification Tools

The GPC browser allows public access to the GPC Standard on-line

- Advanced and customised searches are available to allow users to find the relevant information.
- The GPC Standard is published in different downloaded formats (Excel, Json and Xml).
- GPC Translations are available on-line and can be downloaded from the Browser.



The screenshot shows the GPC Browser website. At the top is the GS1 logo and navigation links: About, Standards, Services, Industries, News & Events, and a button 'Get your barcodes'. Below the navigation bar is a breadcrumb 'Home > Browser'. The main header area is orange and contains the text 'GPC Browser' and 'The GPC browser allows you to browse all components (Segment, Family, Class, Brick and Attribute) of the current GPC schema.' Below this is a search bar with a dropdown menu for language (currently set to 'English') and a dropdown for 'GPC as of May 2023'. To the left of the search bar is a list of search filters: 'Search in Code', 'Search in Title', 'Search in Definition (Includes)', 'Search in Definition (Excludes)', 'Include Attributes/Values', 'Trim Search Results', 'Search in words combination', and 'Exact wording'. Below the search bar is a list of languages: Croatian, Czech, Deutsch(German), Dutch, English, Finnish - Suomi, Français - French, Greek - ελληνικά, Hungarian - magyar, Italian, Japanese - 日本語, Korean - 한국어 (대한민국), Latvian - latviešu, Norwegian - norsk, Persian - فارسی, and Polish. To the right of the language list is a search input field with a magnifying glass icon. At the bottom right of the screenshot is an orange box with the URL 'https://gpc-browser.gs1.org/'.



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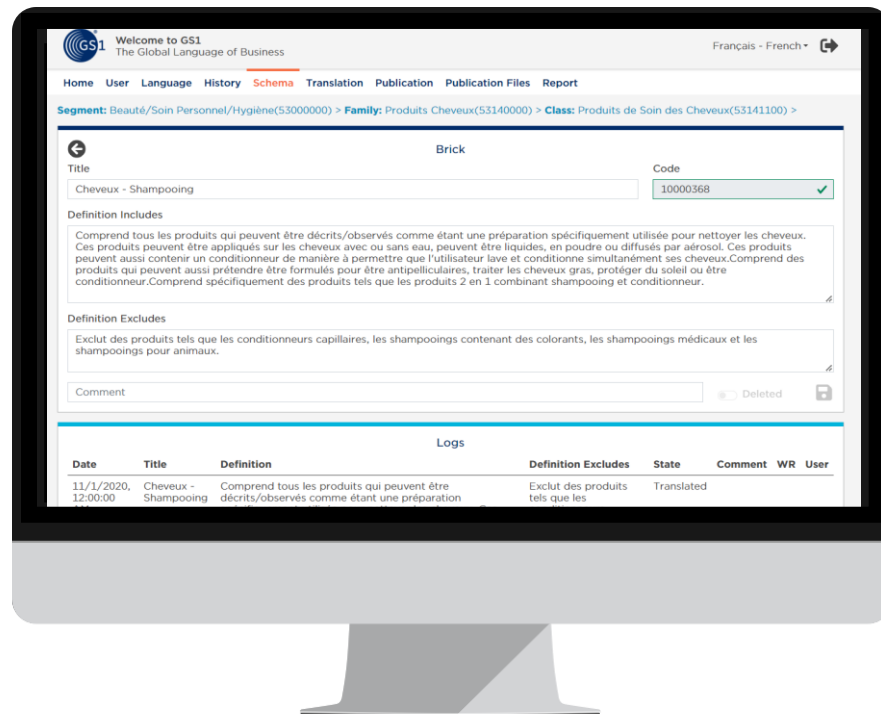
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Masterclass: Global Product Classification Tools

The new **GPC MO translation tool** provides improved functionality for MOs to easily translate the GPC standard into their language. Standard outputs have been modernised, new reports and output file formats are available, including JSON.

Over 20 translations are currently available ensuring easy adoption worldwide, thanks to the efforts of our many MOs around the globe.



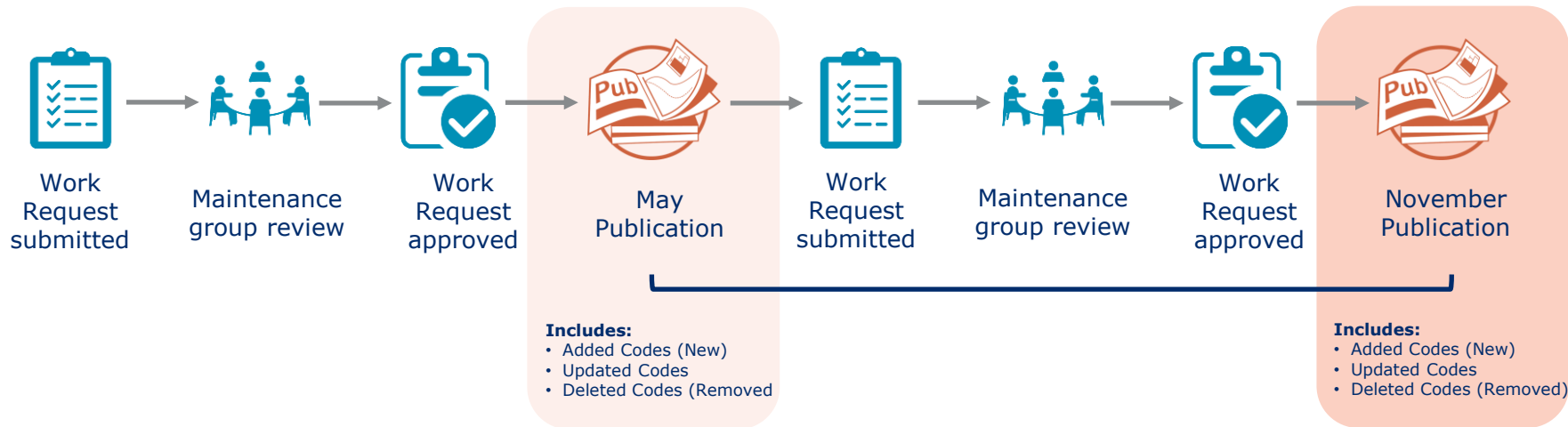
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Masterclass: Global Product Classification Process

- The standard is developed by the community through the GPC SMG, consistent with the Global Standards Management Process (GSMP).
- Global Product Classification Standard is published twice per year, (every May and November).



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Cornelia Willutzki,
Senior Standards Expert
GS1 Switzerland



Masterclass: COOP use case

- In the current classification, different products are grouped together in the same brick.
- To promote data/information transmission, retailers required to have product specific information at brick level.
- Further product details can be leverage through attributes (e.g., Colour, Formation, Consumer Lifestage, Corded/Cordless)

English GPC as of November 2022 eye liner

Segment 53000000 Beauty/Personal Care/Hygiene

Family 53160000 Cosmetics/Fragrances

Class 53161000 Cosmetic/MakeUp Products

Brick 10000533 Cosmetic/MakeUp - Eyes


Definition: Includes any products that can be described/observed as a Cosmetic/MakeUp preparation or item specifically designed to enhance or decorate the appearance of the eyes. Includes eye shadow and eyebrow sticks.

Definition Excludes: Specifically excludes false eyelashes. Excludes products such as General-Purpose Cosmetic/MakeUp Combination Packs, and Preparations not solely intended for the eyes.

Attribute 20000638 Type of Cosmetics - Eyes

Definition: Indicates, with reference to the product branding, labelling or packaging, the descriptive term that is used by the product manufacturer to identify the type of cosmetics for the eyes.

Attribute Value 30003856 eye liner



English GPC as of May 2023 dental floss

Segment 53000000 Beauty/Personal Care/Hygiene

Family 53180000 Personal Hygiene Products

Class 53181500 Oral Hygiene

Brick 10000384 Oral Care - Aids (Non Powered)

Definition: Includes any products than can be described/observed as a non-powered aid specifically designed for the use in the care and hygiene of the mouth, teeth, tongue and gums typically intended to maintain oral hygiene. Includes Tongue Cleansers, Dental Floss, Toothpicks and non-powered Toothbrushes.

Definition Excludes: Specifically excludes all powered oral care products and aids. Excludes products such as Powered Oral Care Aids, Powered Toothbrushes, Toothpaste, and Denture Products.


Attribute 20000045 Consumer Lifestage

Attribute 20000381 Type of Oral Care - Aids (Non Powered)

Attribute Value 30003778 DENTAL SCALER

Attribute Value 30003915 FLOSS BRUSH

Attribute Value 30003917 FLOSS/TAPE



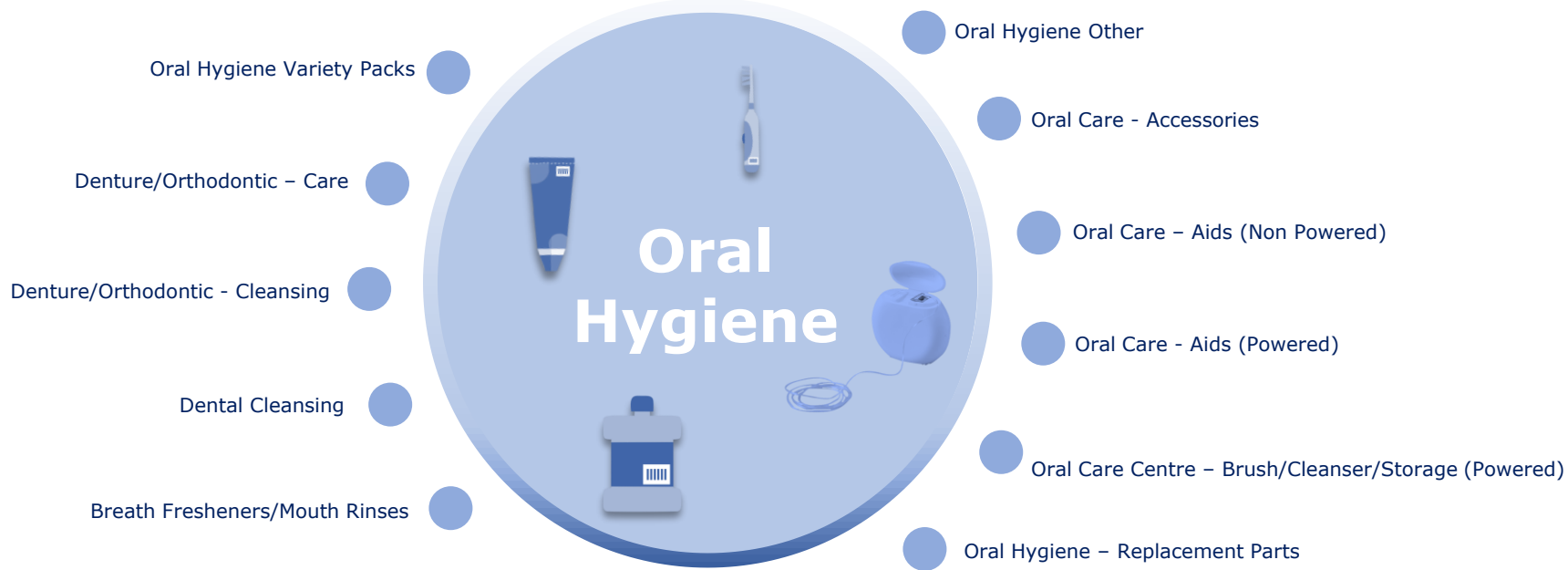


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Masterclass: Oral Hygiene challenges



The brick-level structure lacked specificity, making it impossible to distinguish between various oral care products.



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Masterclass: Oral Hygiene Modernization

Old Structure

Bricks

11

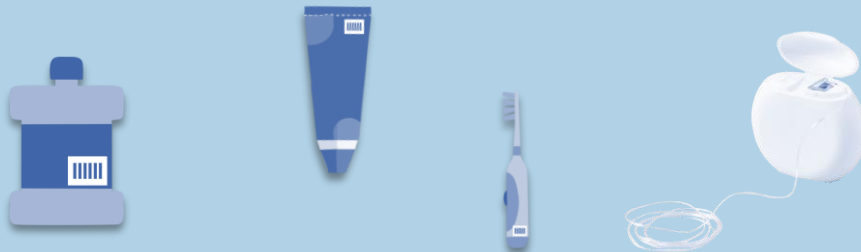
Current Structure

Bricks

22

Oral Hygiene

This structure describes at brick level the products (**W**hat they are) and not in which channel / vertical they will be sold in or their intended use (**H**ow and **W**here they are used).

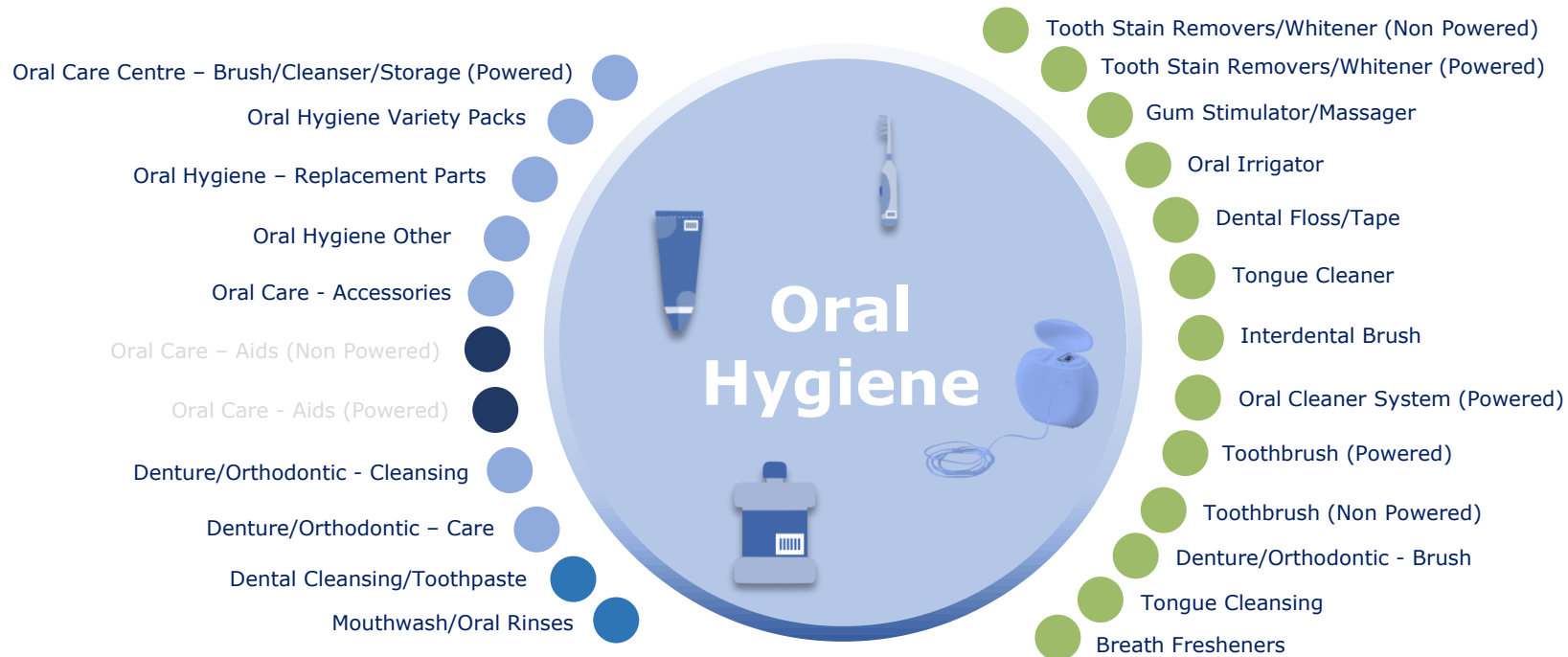


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Masterclass: Oral Hygiene Modernization



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Masterclass: GPC Modernization – Next steps

- There is a need for action in the Beauty/Personal Care/Hygiene segment as well as other segments on the near food area.
- Adjustments should be made to current bricks so that a brick effectively classifies a specific product category.
- The GPC Standard aims to achieve the following goals:
 - Facilitate purchasing programs by enabling buyers to pre-define sets of relevant products.
 - Establish a global and common language for category management and serve as a pivotal classification system between the information exchange parties.
 - Be a key enabler of the Global Data Synchronisation Network, Verified by GS1 and Activate service.

These objectives can be achieved if the required adjustments are implemented within the specified segments.



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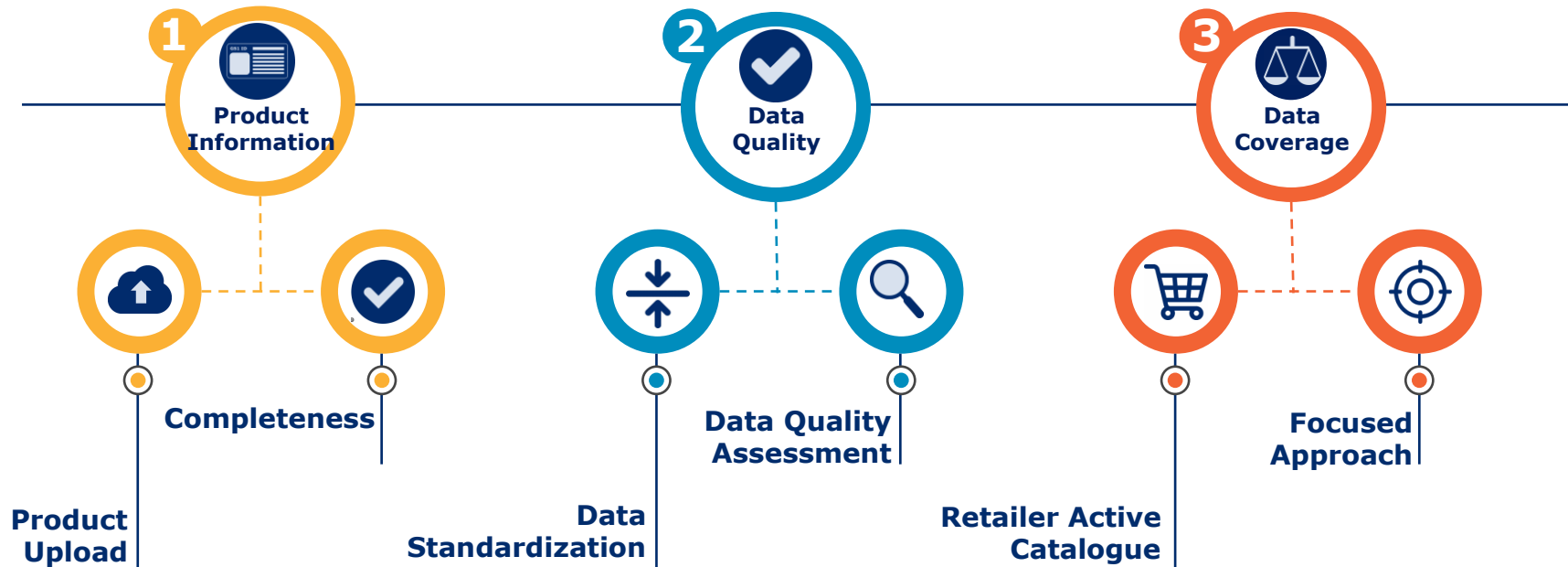


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Paulo Barata,
Data Content and Quality Senior
Manager
GS1 Global Office



Data Analytics



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Data Analytics



Retailer Active
Catalogue



Category
focused

242K

Unique GTINs

73K

Unique GTINs in GRP

30.3%

% Coverage

23

Categories



Beverages

26.4%

% Coverage



Personal Care

34.5%

% Coverage



Food

32.6%

% Coverage



Electronics

28.4%

% Coverage



Confectionary

30.2%

% Coverage



Apparel



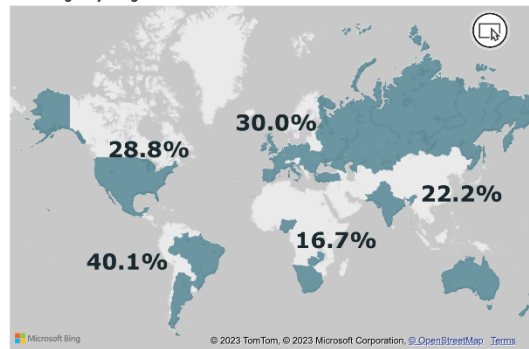
Home Care

38.7%

% Coverage

tbd

Coverage by Region



Data
Coverage



Data
Quality



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Focused approach - by category



Home Care



Laundry
Detergents



Dish Care



Personal Care



Oral Care



Skin Care



Deodorants



Personal
Cleansing & Washing



Razors & Blades



Shampoo /
Conditioners



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Data Coverage - Focused approach



Home



Category



Brand



Country



Analytics



Personal
Care

56K

Unique GTINs

19K

Unique GTINs in GRP

34.5%

% Coverage



Deodorants

45.6%

% Coverage



Shampoo &
Conditioners

43.8%

% Coverage



Oral Care

37.7%

% Coverage



Skin Care

25.3%

% Coverage



Pers Cleansing &
Washing

37.5%

% Coverage

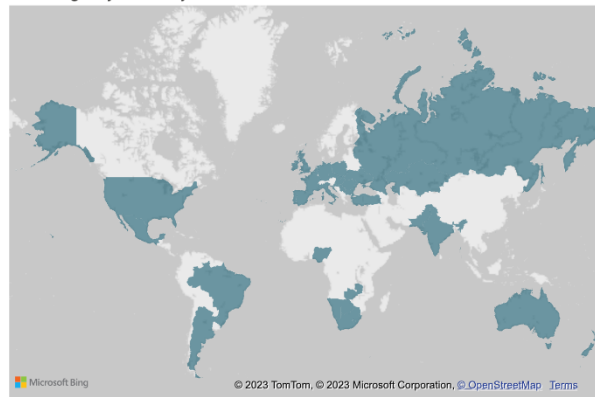


Razors & Blades

31.8%

% Coverage

Coverage by Country of Sale



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Focused approach - by category



Home Care



Laundry
Detergents

Machine vs
Manual Wash



Dish Care

Manual vs
Auto Dish



Personal Care



Oral Care

Toothbrush vs
Toothpaste vs
Mouthwash



Skin Care



Deodorants



Personal
Cleansing & Washing



Razors & Blades

Disposable vs
Non Disposable



Shampoo /
Conditioners



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Next Steps

- Coverage Dashboard can be the initial step to have all speaking the same language.
- By integrating industry feedback into the GSMP process, we can have one GPC standard that are more likely to be adopted



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THANK YOU !!!

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Global Standards Manager

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