SAM'S CLUB MX RFID PLAYBOOK

For Sam's Club MX Stores

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The requirements in this version supersede all previous playbooks.

General Overview

What Industry Standards to Follow?

Sam's Club MX is following all industry standards set forth by the GS1 EPC Tag Data Standard, GS1 RFID tag placement standard, and Auburn University RFID Lab ARC inlay standard. All tagging requirements must meet these standards prior to arriving in our stores.

Departments already in scope:

The following departments should currently be arriving in store with RFID tags:

Sam's Club MX

21 - Domestic	33 – Women's Apparel	67 - Accessories
22 - Basic Apparel	34 – Children's Apparel	60 - Mattresses
23 - Men's Apparel	66 - Shoes	XX – Automotive

- All national, proprietary, supplier, and private brands.
- Sam's Club MX Stores
- Omni-Branded Items
    - An omni brand is a brand that is carried both in store and online
    - All items within this brand are in scope, even if the item is carried online only (i. an online assortment extension)
- Team sports apparel and sports licensed hardlines (except Championship product)
- Licensed apparel and souvenir merchandise (e. Disney shops)
- Chase Buys, Annual Event items, including special buys
- SOTC Store of the Community Items
- All Basic/Replenishable SKU's

Out of Scope:

- 3P and Ecommerce only brands
- An ecommerce only brand is a brand that is only carried online (i.e. marketplace)
- Team sports apparel and sports licensed hardlines "hot market" Championship product (i.e. Superbowl, World Series, etc.) and Post Regular Season Play

Getting Started

The following outlines a standard framework to integrate RFID into packaging. This includes major points and areas that should be considered; However, every company must tailor these steps to fit the needs of their business and supply chains.

- Identify the ways that RFID can help improve your operations. Refer to the "RFID Use Cases for Suppliers" section for details
- Develop an internal team

- Engage with your packaging provider and if needed you will also need to engage with an approved RFID Inlay Manufacturer
- Begin procurement discussions and provide forecasts to your packaging and RFID Inlay provider
- Begin data management and serialization discussions with your RFID packaging provider. Refer to the "RFID Encoding & Serialization Requirements" section for details
- Develop quality check process to ensure all items are tagged according to all requirements in this Playbook

Determine Inlay Manufacturer

Suppliers may only select from the approved list provided on the Auburn University RFID Lab's Website from the appropriate Spec. Any inlay manufacturer not listed on the appropriate Spec cannot produce inlays for packaging being shipped to Sam's Club MX. Even if using an approved inlay provider, you must still submit the final production samples to the Auburn University RFID Lab for approval.

Select RFID Inlay Spec

Sam's Club MX has a set of ARC inlay specifications that are performance approved from the Auburn University RFID Lab. The Auburn University ARC standard ensures RFID tags meet or exceed the levels of performance and quality necessary to provide benefit in a consistent and cost-effective manner.

Sam's Club MX

Department	Subcategory	Inlay Spec	Approved Inlay List
D21 – Domestic	All	W4	https://rfidlab.org/arc/spec-w4.php
D22 – Basic	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D23 – Men's	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D33 – Ladies	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D34 – Children's	Apparel	W1	https://rfidlab.org/arc/spec-w1.php
D66 – Shoes	All	W3	https://rfidlab.org/arc/spec-w3.php
D67 – Accessories	All	W3	https://rfidlab.org/arc/spec-w3.php
D78 - Mattresses	All	Y2	https://rfidlab.org/arc/spec-y2.php
D92 – Automotive Batteries	All	P	https://rfidlab.org/arc/spec-p.php

Determine Packaging Resource, RFID Encoder/Service Bureau

Brand owners can utilize their own RFID packaging resource to develop and print their RFID inlays but must adhere to the GS1 standards and ARC standards and obtain approvals from Auburn.

A list of RFID packaging resources is available at https://rfidpackagingresources.org/. These are packaging providers that have supplied packaging for other RFID Programs. This is NOT an endorsement or list of nominated suppliers.

Suppliers can also utilize other RFID packaging providers that are not listed. All label providers or packaging resources will need to source an Auburn university ARC approved RFID inlay.

Identify Inlay Size

Use the largest RFID inlay size available that fits your packaging.

If your packaging does not fit the smallest inlay size available within the approved spec, add a generic embedded inlay hangtag or a separate paper-based sticker to your item.

Determine Placement of RFID tag

The guidelines below are general in nature. Please consult the GS1 Apparel Placement Guideline manual for product specific placement and adhere to GS1 standards. The link can be found below or at the end of the document:

https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=429&language=en-US&PortalId=0&TabId=134

For domestics or items with additional packaging types, such as batteries, please consult the following tagging guidelines: https://rfid.auburn.edu/tagging-location-guide/
https://rfidlab.org/wp-content/uploads/PlacementGuide_Annex_SamsMX_V1.pdf

EXISTING PACKAGING TYPE	RFID APPLICATION
Primary Branded Hangtag	Embed inlay into hangtag
Size Strip	Add a joker ticket or embedded inlay into primary hangtag; RFID cannot be placed within the size strip.
Joker Ticket/Sunglasses	Add a separate paper-based sticker or embed inlay into joker
Backer Card	Add a separate paper-based sticker
Bellyband	Add a separate paper-based sticker
Blisters/Clamshells	Add a separate paper-based sticker
Header Card	Add a separate paper-based sticker
Folding Carton	Add a separate paper-based sticker
Jewelry Carding/Box	Add a separate paper-based sticker/E-mail Auburn for further direction
Wallet/Belt/Watch	Add a separate paper-based sticker or attach hangtag directly to item
Polybag	Add a separate paper-based sticker
Collar Card	Add a generic embedded inlay hangtag
Plastic Bottle	Add a separate paper-based sticker
Metal Can	Please contact http://rfidlab.org/aleccontactform/

Jewelry - Fine, Bridge	- No metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging - RFID sticker to be placed on bottom of fine jewelry box - Out of box chains will use a rattail label
Jewelry - Costume	- No metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging - RFID sticker to be placed in the back of carding, as far away from metal as possible
Jewelry - Care	- RFID Sticker cannot be placed on bottom; place on backside or side of packaging - For items containing liquid or metal, contact RFID Lab, Auburn University
Watches - cuff stands	- Watches displayed in a watch cuff only, requires a special inlay - RFID sticker must be placed in the top of the base
Watches - Boxes	- RFID Sticker cannot be placed on the bottom; side of box is preferred. - No metal foils, metal containers, holograms or metallic inks should be used on the packaging. If so, you must receive Auburn approval prior to bulk production of the packaging
Watches - Batteries	Packaging may need to be redesigned to accommodate RFID inlay
Hardware/Parts	Place sticker as far away from metal as possible within the packaging

Review RFID Application Formats

Please contact RFID_Sams_MX_etiquetado@wal-mart.com for any questions.

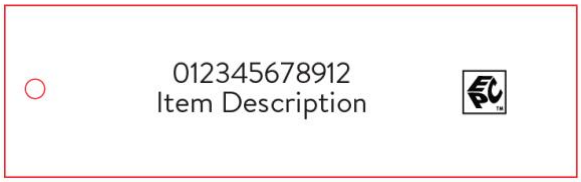
Embedded Hangtag

- Any changes to die lines or artwork will be managed through Sam's Club Packaging Team
- Inlays must be embedded into branded hangtag.
- 4 mm gutter or greater around the embedded inlay
- All branded tags must have inlay embedded by Q4 2024

Folded Programs Only with Size Strip

- Swiftach embedded inlay hangtag through the inside left neck/left waist seam. Swiftach length is ½ inch and the embedded hangtag will need to be tucked inside the shirt or pant. **This is an exception from the GS1 placement guidelines, for folded programs only**
- If the item contains a joker ticket, embed inlay into joker

Generic Embedded Hangtag Format



Generic embedded hangtags should only be used when size strip or hanger collar card is the core branded packaging, or if the inlay sizes available do not fit your current packaging. It must be placed behind the primary hangtag.

Hangtag dimensions: 83mm x 25mm

Specifications:

- Embed inlay between C2S paper stock
- Material: ~14pt. C2S (minimum; glossy both sides)
- Font: 12pt. Bogle Regular (centered vertically & horizontally from left side of logo to right side of swift tack hole)
- EPC logo: Centered vertically and placed as shown
- Prints: Black ink on one side of tag
- 4 mm gutter or greater around the embedded inlay

Minimum Copy Requirements:

- UPC # (no bars; human readable)
- EPC Logo
- Item Description (picked up from other primary packaging)
- Additional information is allowed

Hanging Programs - Long Sleeve (all brands)

- Armhole placement is allowed

D66 Shoe Hangtags (all brands)

- RFID hangtag must be affixed to shoe
- Embed inlay into branded hangtag
- RFID stickers cannot be used or attached anywhere on the shoe box

Private Brands Only

Tag options for plastic packaging are:

- If the packaging contains both paper and plastic, suppliers must place the RFID tag on the paper instead of plastic
- If plastic is the only packaging for the product, suppliers must choose one of the following options:
    - Place the RFID tag loosely inside the packaging. Ensure that the tag won't reach the bottom of the package during transportation/handling and touch the metal shelves
    - A hangtag attached to the packaging or product

Tagging Requirements

- RFID tags should not be sewn into the physical item

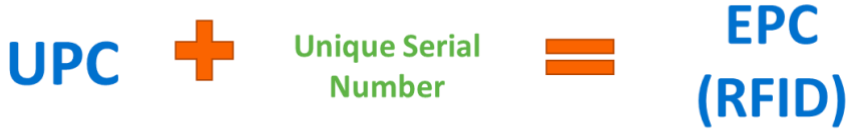
- RFID inlay stickers should be placed on packaging only
- RFID tags or inlays cannot cover any text or images
- If an item is being stickered, the domicile with the country of origin should not be covered up - it needs to be visible to the customer. The supplier can print the country of origin on the RFID sticker if needed
- No staples, perforations, swift tachs, folding or die cuts through the inlay as it will make the inlay unreadable
- No RFID inlay placement on bottom of polybags, bottom of boxed items, near under wire for bras, on glass, on liquids, on Silvadur, or near metal/foil
- RFID cannot be applied to an EAS tag
- No two (2) scannable UPC barcodes are allowed on the same item
- Please make sure that that there is only ONE RFID tag per product
- No metal foils, holograms or metallic inks should be used on any packaging containing the RFID inlay. If so, you MUST receive the RFID Lab approval prior to bulk production of the printed packaging

EPC Symbol

- The EPC logo example represents the bare minimum of information that should be shown on your packaging to identify RFID tagging
- The EPC logo is an industry standard to inform the customer and store associate that the product contains RFID
- The EPC symbol should not be shown on any packaging that does not contain an RFID inlay
- See this link for the EPC Symbol image file and related documentation: https://www.gs1.org/standards/epc-rfid/guidelines
- Download the EPC symbol and usage guidelines directly here: https://www.gs1.org/sites/default/files/epc_symbol_usage_guidelines.zip

RFID Encoding & Serialization Requirements

- All tags are to be encoded appropriately per EPC Tag Data Standards (TDS), resulting in unique serialization for each item. The SGTIN-96 tag encoding standard maintained by GS1 is to be used



- Please keep in mind that each serial number must be unique to that item and can run a risk of having duplicate numbers if not managed properly throughout the development process. Please ensure unique serialization is managed when using multiple packaging providers for the same SKU. See the link for more information: https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1946
- Tags must be permalocked to prevent tampering
- All tags must undergo quality and data integrity checks prior to entering the Sam's Club MX supply chain
- The EPC Encoder/Decoder Tool may be found here: https://www.gs1.org/services/epc-encoderdecoder

ALEC - Approval of Production RFID Packaging Samples

Auburn University RFID Lab's ALEC program is to help Suppliers ensure that their RFID tagged item meets all the industry requirements.

Refer to the ALEC submission guide at https://rfidlab.org/wp-content/uploads/General-Form-Submission-Guide.pdf for detailed instruction before starting this process.

If you have already received an approval, please use this link to apply to the approval to Sam's Club Mexico.

Before any shipment of goods can begin, you must receive RFID lab Approval.

Send Five (5) EPC tag samples of the same item only (no product or packaging) to the RFID Lab for ALEC validation prior to bulk production. These may be branded hangtags, generic hangtags, or stickers.

- Submit one UPC per Submission Form
- You will need approval on a representative UPC (SKU) for
    - Every brand
    - Every packaging type used
    - Every agency used
    - Every RFID inlay model
    - Every Tagging location
- You do not need to submit every individual SKU separately. Only submit where differences occur from the list above.
- Send five inlay samples of the one representative UPC.
- The RFID Tags MUST be production quality
- Within the submission form, you will be asked to add a list of all items that follow the same criteria as the representative SKU
- Please complete and submit the online submission form at https://rfidlab.org/alecsubmissionform/. Print the PDF confirmation and include it along with the samples
- Testing will not begin until the printed confirmation form has arrived at the lab
- Actual product or packaging will only need to be sent when specifically requested by the RFID Lab. Please note: Any product sent to the RFID Lab will **NOT** be returned to the product supplier
- **Watches, Fine Jewelry, Costume Jewelry and Shoe & Jewelry Care suppliers MUST send actual product packaging along with RFID tags attached to item**
- Product Suppliers are responsible for submitting their own samples to the RFID Lab. Packaging resources CANNOT submit samples on behalf of the Product Suppliers to the RFID Lab
- Product Suppliers who decide to switch inlay models and/or inlay providers and/or Service Bureau AFTER receiving validation from the RFID Lab, will need to re-submit tag samples again for validation
- Product Suppliers who decide to change/add new packaging with materials that may interfere with readability, will need to re-submit tag samples again for validation
- Once you receive an email approval from the RFID Lab, you are approved to move into bulk ordering and production

Supplier Accountability

- Product suppliers are required to have a process in place to ensure all items that are delivered to Sam's Club MX have an ARC approved RFID tag

- Quality checking includes ensuring there are no duplicate serial numbers and that each tag is properly encoded with the correct GTIN for the item it is on
- Product suppliers will be responsible for all costs incurred for any RFID errors at store level

RFID Use Cases for Suppliers

Please refer to the following research paper published by Auburn University for potential uses of RFID in your operations and supply chain.

https://rfid.auburn.edu/wp-content/uploads/2021/02/Empirical_Study_of_RFID_in_Supply_Chain.pdf

https://rfid.auburn.edu/wp-content/uploads/2021/02/CHIP-Proof-of-Concept-Results-Auburn-RFID-Lab.pdf

RFID is being used by suppliers to automate inbound audit processes, improve Inventory accuracy, and outbound validation.

Contacts

Sam's Club MX Corporate

General questions: Sams_MX_RFID@wal-mart.com

Sam's Club MX Private Brand Packaging

RFID_Sams_MX_etiquetado@wal-mart.com

Auburn University RFID Lab

General Questions rfidlab.org/aleccontactform/
ALEC RFID tag samples validation submission form rfidlab.org/alecsubmissionform/
ARC Website https://rfidlab.org/arc/

GS1 U.S.

Website: https://www.gs1mexico.org/es/
Tagging Location Guide:
https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=429&language=en-US&PortalId=0&TabId=134
Supplier-oriented introduction to RFID: https://site.gs1us.org/RFID-success.html
Serialization Guide https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1946
Tag Data Standard https://www.gs1.org/standards/tds