Get Retail Ready with a GS1 barcode
A guide to getting an Irish barcode for your product

www.gs1ie.org/retail-ready
Getting your barcode – a key milestone

Getting a barcode for your product represents a key milestone for your business. You are taking things to the next level and are getting ready to sell to retailers locally – and if you choose to – internationally.

GS1 is an association of members, established by industry for the purpose of allocating and managing barcode numbers and related supply chain standards. GS1 is the only authorised body for the allocation of barcode licences.

We are here to help you complete this significant step in getting your product ready for a retail listing. So contact us today if you have any questions about barcode numbers or symbols.

Tel: 01 208 0660
Email: helpdesk@gs1ie.org

Visit the About Us section on our website if you’d like to know more about our organisation’s structure and governance.

Benefits of using a GS1 barcode

Choosing a GS1 barcode prefix to identify your products brings many benefits to your business:

- **Uniqueness** – with a GS1 licence your barcode numbers are solely registered and traceable to you alone. No other business can use these numbers and they have not been licenced to anyone previously.

- **Verifiable** – with a barcode linked to your company, retailers and distributors can look up your barcode number to verify its ownership.

- **Traceable** – the unique barcode number attached to your product is a key component for traceability and international customs systems.

- **Scalable** – GS1 product identification numbers form the basis of several systems that your business may need in the future, such as electronic invoicing and sharing digital product data.

Beware of online sellers offering cheap barcodes for once-off fees

One of the most common phone calls we get is from producers wondering what the difference is between a barcode from GS1 and others they see on the internet.

Go to www.gs1ie.org/cheap-barcodes or scan the QR code to read the full article on our website.
What do you need to barcode a product for retail in Ireland?

To barcode a product you need two things – a) an actual barcode number and b) the corresponding barcode symbol or image.

Barcode numbers are created by brand owners for their products using a GS1-issued prefix. It is from this prefix that barcode numbers are allocated to products & outer cases. Once you have a complete barcode number you can generate the matching barcode symbol.

As a member of GS1 you will have access to a free tool called “Barcode Manager” that will look after the allocation and management of your barcode numbers. Your graphic designer or packaging specialist should be able to produce the barcode image for you. If not, you can use the symbol generation service on Barcode Manager to download the barcode image, for a small fee. www.gs1ie.org/barcode-manager

Get #RetailReady with an Irish GS1 barcode

Registering your business with GS1

1. Registration – GS1 is a non-profit, membership organisation. We were founded, and are governed today, by retailers, suppliers and representatives from industry. Our role is to provide help and support to members that are implementing GS1 standards. To get a barcode you need to be a member and you can register your business online through our website. Go to www.gs1ie.org/join-gs1 to get started.

2. Barcode Licence – To create barcodes, you need an exclusive range of barcode numbers for your company. This is granted by an annually renewable licence. There are different licences depending upon the size of your product range, now and into the future.

Choosing the right barcode licence for your business

Option 1 = Standard Barcode Licence (GCP 9)

This is the most common, standard barcode licence for a 9 digit company prefix. This prefix enables up to 1,000 unique barcode numbers to be generated for products and outer cases.

Option 2 = Artisan Barcode Licence (GCP 11)

This licence is for niche and artisan producers only, who are unlikely to ever need any more than 10 barcodes for both products and outer cases. Each GCP 11 includes 10 complete numbers. For more than 20 barcodes (2 licences) over the life of a business, a standard GCP 9 licence is more economical. Remember, outer cases (shipping boxes) need their own unique barcodes too.

Note: Barcode licences cannot be subsequently “exchanged” or “upgraded” as each licence is for a specific bank of numbers. If you run out of barcode numbers, an additional license will be required at the annual rate.

Full details of the licence fees and the application process, as well as the company information you will need to register, are outlined on the “Barcodes made easy” page www.gs1ie.org/start-here on our website.
What is a barcode?
A barcode is simply data in a machine readable format. The printed bars and spaces are of different widths and are combined in specific sequences to represent that data e.g. the numbers in a product code. A scanner reads a barcode by measuring the bars and spaces and decoding the information contained.

What’s in a retail barcode?
A retail barcode contains a code called a GTIN or Global Trade Item Number. A GTIN is the globally unique identification number allocated to identify a product or service. It is created using a GS1 Global Company Prefix (GCP). GCPs are licenced to manufacturers & other users by their local GS1 country office.

GTIN or Global Trade Item Number is the official term for “barcode number” and covers barcode numbers of all lengths, including EAN and UPC codes.

Levels of product packaging
The starting point for allocating barcode numbers is the product you sell to the end customer. This could be a vase, scarf, candle, picture, a jar of jam or a piece of jewellery or clothing, for example.

Retailers and distributors refer to this first level by many terms including retail unit, consumer unit, trade item or even “Base Unit” or “each”.

Depending upon the scale of your business and the kind of product your offer, retail customers may ask you to supply products in boxes or “outer cases”. This can be a box of many units of one product or a mixed box. Each box or mixed box will have its own dedicated barcode number.

Want to feature on social media?
Put your business in the spotlight
After you get your barcode be sure to tweet us a picture of your product sporting its new Irish barcode!

Use the hashtag #retailready so that we can find you. You can also send your product shots to us on Facebook & Instagram – don’t be shy!

Email: marketing@gs1ie.org
Product hierarchies and packaging levels

The term “product hierarchy” means the relationship that exists between one of your retail products and the box it is packed in for warehousing and distribution.

You will allocate one unique barcode number to each level in your product packaging hierarchy i.e. one for the retail unit and a second one for the outer case.

Outer case or traded unit

Base unit or each

The most commonly used barcode symbols:

EAN 13 barcode symbol
A barcode used for consumer products sold at a point of sale.

EAN 8 barcode symbol
A barcode for small products that do not have sufficient label or packaging space for an EAN 13.

UPC A
A barcode used for retail scanning in selected outlets in North America*

ITF 14
A robust barcode used on outer case boxes for warehousing & distribution

What barcode symbol is needed to sell my product in a shop?

To sell a product in a retail store you will need to include an EAN 13 barcode symbol on your product packaging (or an EAN 8 if your product is very, very small).

Do I need to put a barcode on a full box of product?

If you sell your products to retailers “by the case” your customers may ask you to also put a separate barcode on the outer box. The preferred symbol for a barcode on an outer case box is called ITF 14. The size guide and specifications for an ITF 14 barcode symbol are shown on page 7. You should include two symbols on an outer case box – one on the short side and one on the long side.
**A special note on exporting to North America**

If you successfully secure a distribution arrangement for the United States or Canada you may require a different barcode number & symbol, called a UPC. Your distributor in the US will be able to advise you if your retail customer can scan an EAN barcode or if they specifically require a UPC.

“UPC” is the commonly used term to refer to all barcode numbers in North America. You may come across it written in many documents or online forms. A form asking for your “UPC code” is looking for the barcode number (GTIN) and does not necessarily mean that a 12 digit UPC number is the only one acceptable.

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**Barcode Manager**

GS1 Ireland provides all members with access to an online tool called Barcode Manager. You will use this tool to generate, store and manage all of your barcode numbers as you allocate them.

The benefits to you of using Barcode Manager include:

**Fast** - With a streamlined barcode number creation process, Barcode Manager helps you create barcodes quickly and efficiently.

**Accurate** - Use Barcode Manager to track the barcode numbers you have used, reducing the risk of error and duplication.

**Secure** - Barcode Manager gives you an external, online backup of all your barcodes and product descriptions.

**Easy to use** - Barcode Manager has a user friendly interface, with easy to follow instructions.

**Symbol images**

If your packaging designer or printer is unable to generate barcode symbol images for you, you can use Barcode Manager to download high resolution image files. Each barcode symbol requires 1 credit. Credits can be purchased through the Members Area of the GS1 Ireland website.

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**Printing your barcode numbers**

When you have allocated a barcode number to a product, the next step is to print that number as a barcode “symbol”. For scanning in a retail store the most commonly used barcode symbol is an EAN 13.

The EAN 13 symbol is usually created by your graphic designer or printer and included as part of the design of your packaging.

Alternatively it can be printed on a label and attached to your product. Where a barcode is placed on your product will greatly be determined by the type, shape and size of your product in its final “shop ready” form, but the recommended position is on the back, in the lower right corner.
Barcode symbol sizes

The ideal or “nominal” sizes for an EAN 13, EAN 8 and ITF 14 symbol are shown below.

The target printed size for an **EAN 13** symbol is 37.29mm wide by 27.85mm high.

An **EAN 8** symbol should be 26.73mm wide by 21.31mm high.

An **ITF 14** symbol printed onto an outer case should be 142.75mm wide and 32mm high.

These sizes will give you an idea as to the amount of space you will need to leave on your packaging to accommodate your barcode symbol. You will also need to include some white space (called a quiet zone) on each side of the barcode. This is an important aspect for a scanner’s ability to read a barcode.

![Barcode Example](image)

**Important note:** This booklet provides a summary overview of the basics of barcoding for retail and is not an exhaustive manual.

For the full technical specifications for generating barcode symbols and placing them on packaging please refer to the latest issue of the **GS1 General Specifications**.

Barcode colours

Scanners read barcodes by using a red light to recognise the contrast between the bars and spaces of the symbol. Black bars against a white background are the safest choice, but other combinations of dark bars on light backgrounds will also work well.

Checking barcode print quality

Once you have successfully allocated a unique barcode number to a product and generated the correct symbol, it is vitally important to ensure that the print quality is high enough to ensure that it will scan when it gets to store.

A barcode quality checklist

Check you product barcode and label for each of the following:

- Is it the right number allocated to that product?
- Is it the right symbol type?
- Does it meet the minimum size requirements?
- Is it printed clearly and not covered by any other folds or labels?
- Is it the right colour with dark bars on a light background?
- Is it positioned correctly on the pack?

Barcode verification

If you need help checking your barcode structure or print quality you can get the symbol verified using a Barcode Verification Service (fees apply).

Verification is a rigorous set of tests that measures various aspects of a barcode symbol from its size, print quality and the contrast between the darkness of the bars and the lightness of the spaces. 15 checks are carried out during the barcode verification process.

Verification is best done on final artwork or a final print sample, before you go into full production! It can prove very costly to get barcodes wrong, and can result in thousands of Euro in wasted packaging – so take the time to double check everything before going to print!

If in doubt phone the GS1 Ireland Helpdesk if you have a question about structuring your barcode numbers correctly and choosing the right symbol. Details of the full verification service are available on our website [www.gs1ie.org/barcode-verification](http://www.gs1ie.org/barcode-verification).

Free Verifications

As a new member you will receive two free barcode symbol verifications. This service will help you ensure that your symbols are correctly structured and ready to be printed.
Online training

All new members have access to a free training module on our elearning platform called the GS1 Learning Zone.

The “Getting Started with GS1” course will provide you with an overview of how to generate barcode numbers for products as well as explain the key features of EAN 13 barcode symbols.

Details on accessing the Learning Zone will be sent to you after your barcode licence is issued.

See [www.gs1ie.org/elearning](http://www.gs1ie.org/elearning) for more information.