

When the green bin is collected by your Local Authority, it makes its way to EnviroSort. EnviroSort is a Commingled Materials Reclamation Facility (CMRF). Once received at EnviroSort, the recycling is sorted into the key material types: glass; paper, card and cartons; steel tins; aluminium cans; and plastics. Once sorted, each material type then leaves EnviroSort for reprocessors within the U.K.

This month/issue we're looking at how we can recycle glass using our green bin collections. Glass is the first material type to be separated from the mixed recycling. Did you know the glass content of green bin collections always increases during January?

Glass is made from natural raw materials such as **silica, soda ash and limestone**, plus additives for specific colours and finishes. Glass contains around 75% silica, (more commonly known as sand). These raw ingredients have to be quarried. This depletes the earth's resources, plus energy is used in their extraction and in the glass making process.

Glass is separated from the other recyclables by a machine called **The Glass Breaker**. Glass is broken into small pieces by moving along a series of rotating metal discs. The glass falls between the gaps between the discs and is stored in a bunker. This glass is called cullet. When cullet leaves EnviroSort and arrives at the glass reprocessor/factory, it is washed and sorted into different colours by using light. It is then liquified (melted), ready to be made into new items. **Glass can be recycled infinitely without losing any of its qualities.**



The Glass Breaker

Only glass bottles and glass jars (also known as container glass and around 30% of all glass is container glass) can be placed into the green bin. These are food and make-up jars and glass bottles, such as water bottles, wine and beer bottles etc. Empty perfume bottles can also be included. You can recycle any colour of glass, including black. (Glass can be sorted by light into different colours at the glass factory.) Lids and labels can be left on as they will be removed during the sorting process. If any lids fall through with the glass, these can be removed at the glass factory by using magnets and recycled. Please don't include corks.

Nail polish bottles can't be recycled due to nail polish being a contaminant. Please don't wash these out in order to recycle them as the contents will pollute the water supply.

Glass bottles and jars have to be placed into the green bin, empty, clean, and dry. Glass will break from around lids during the sorting process. Any liquid or food/product residue can contaminate other items inside the green bin which may result in that load of recycling being contaminated. Food and product residues will also contaminate glass during its reprocessing.

Types of glass that can't be placed into the green bin include window glass, greenhouse glass, Pyrex and heat-proof glass, vape juice bottles and drinking glasses. Whilst they may look similar to glass bottles and jars, these types of glass are manufactured differently and liquify differently and at higher temperatures. It's comparable with butter and cheese, both are made from milk, but they are manufactured differently and melt differently.

Pyrex is manufactured from borosilicate glass. Borosilicate glass is made from silica and boron trioxide. This enables it to withstand high temperatures and it is used for cookware and sometimes vape juice bottles. It won't liquify properly in a glass furnace.

Drinking glasses and vases have been manufactured to be tougher and less likely to break, and often contain added chemicals. Window glass is also manufactured using a combination of chemicals and heat to toughen it. These types of glass liquify at a higher temperature than container glass. This higher liquifying point and the added ingredients used in their composition will cause contamination in any liquified glass.

Mirrors can't go into the green bin as they have a metallic layer which is a contaminant. Mirrors, drinking glasses, vases and Pyrex items, if unbroken, can be taken to a charity shop.

Spectacles/reading glasses can't be placed in your green bin. The lenses are made differently to container glass, plus there are other components such as frames and metal fastenings. These need to go to a charity collecting spectacles or be placed in your black bin.

Lights bulbs also can't be placed into the green bin as they contain electrical components and have been produced from a different type of glass. Light bulbs can be recycled at your local HRC.

China, crockery and ceramics can't be placed into the green bin as they won't liquify in a glass furnace. If unbroken they can be taken to a charity shop, or if broken please place in your black bin.

Recycling 1 tonne of glass saves 1.2 tonnes of raw materials. Plus, 580kg CO₂ is saved throughout the supply chain, air pollution is reduced by 20% and water pollution cut by 50%.

At EnviroSort, we recycled 27,684 tonnes of glass last year. 33,221 tonnes of raw material and 16,056 tonnes of CO₂ were saved when compared with making fresh glass.