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Recycled Content in Caps and Closures

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An introduction.

This report is written to determine the total flow of caps and closures of packaging items onto the UK market, to indicate the potential for the inclusion of recycled content within these packaging components.



Methodology

78% of the total tonnage calculated in this study is accounted for by actual weights (collected for Valpak's EPIC database through various weighing activities), while 22% is accounted for by average weights.

Average weights stored within EPIC do not split out caps and closures from other packaging components of the same material; because of this cap and closure averages were calculated for this study. Average cap and closure weights were assigned through a tiered allocation system. Averages (mean for weight, mode for material and packaging type) were determined for each packaging group from the products within the dataset used. For packaging groups without any real weights in the dataset, averages were obtained from similar groups (those very close in size, or a different case size where the units are different, but the lid weight would be the same). Where these were not available, averages from across EPIC as a whole (e.g., the average lid weight) were manually applied.

Total UK figures have been generated by scaling up from 4 major retailers and wholesalers, totalling 66% of the non-consumer catering market, and 42% of the consumer grocery market.

2019 data was used as this is considered to be the most representative recent data available due to the impact of Covid-19 on sales.

[1] EPIC is the Environmental Product Information Centre – Valpak's database containing over 33 million packaging items from some of the UK's biggest businesses.

Caps and Closures Placed onto The Market in 2019

The scope of caps and closures in this study consists of:

- Actuators, applicators, bungs, caps, cap inners, closures, collars, corks, covers, dispensers, droppers, films, foils, lids, lid inners, muselets, nozzles, over-caps, pistons, pourers, pumps, seals, stoppers, ties, tops, triggers, and valves.

Figure 1: Caps and Closures Tonnage by Material

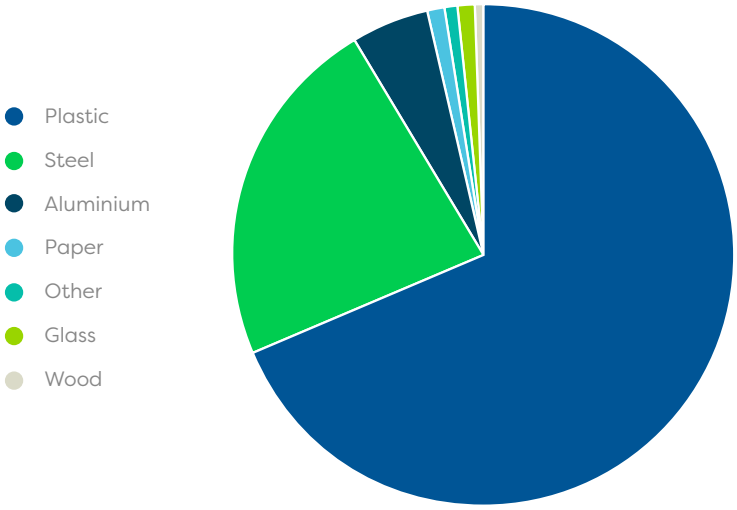


Figure 1 shows that plastic was by far the greatest material category by tonnage at 141,775 tonnes (69% of the total). 65,834 of this was from soft beverages (mostly caps), and 20,041 was from dairy / dairy-alternative products (mostly lids).

Plastic was followed by steel at 47,138 tonnes (23% of the total), of which 34,626 was from alcoholic beverages (mostly caps) and 4,820 tonnes was from condiments, sauces, and oils (mostly caps and lids).

Of the total aluminium tonnage of 10,413 tonnes (5% of the total), 15,695 was from alcoholic beverages (mostly caps and collars). Of the total paper tonnage of 2,286 tonnes (1% of the total), 1831 of this was from dairy / dairy-alternatives (mostly lids). Of the total glass tonnage of 669 tonnes (<1% of the total), this was entirely from dry food products (specifically glass lids on some instant coffee jars – which, it should be noted, also contain plastic seals which are included in the plastic tonnage).

Of the total 'Other' tonnage (which consisted of mostly corks, but also contained a very small amount of wax and rubber seals, and cotton ties) of 1,672 tonnes (1% of the total), the vast majority was from alcoholic beverages (1,661 tonnes).

Figure 2: Packaging Components by Tonnage

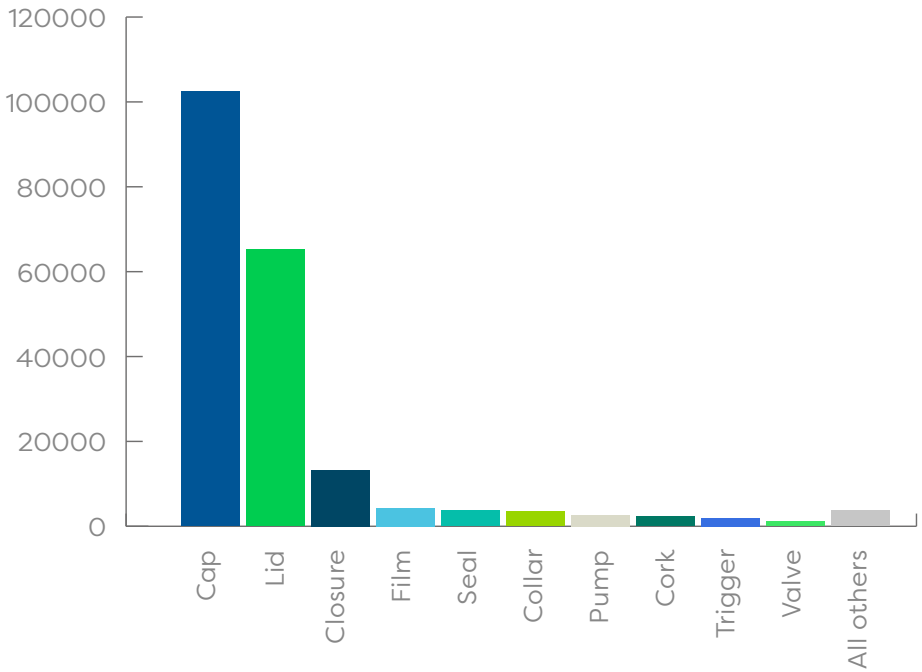
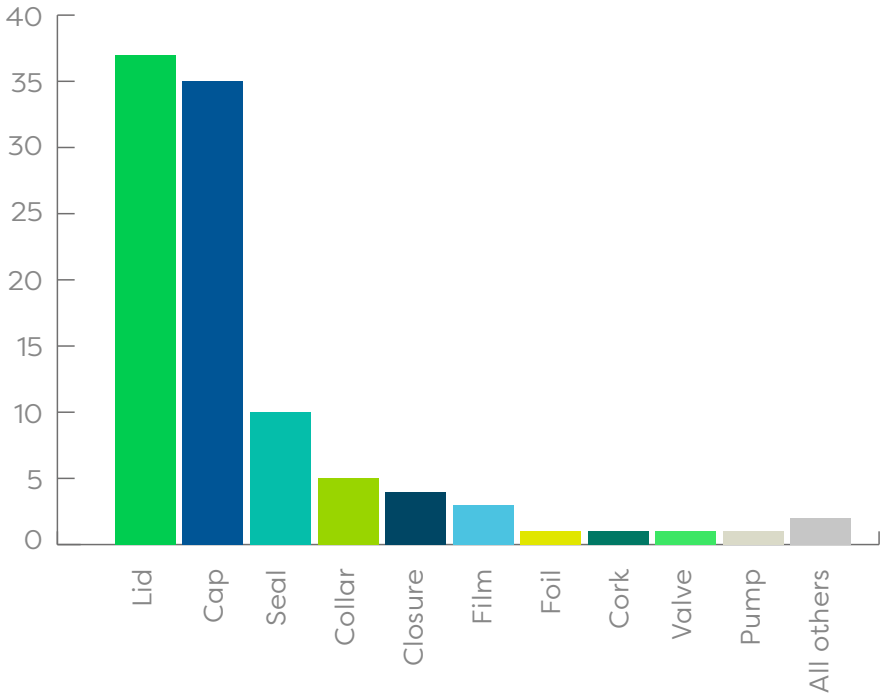


Figure 3: Proportion of Packaging Components by Count



As seen in figures 2 and 3, caps and lids dominate in both tonnage (with caps at 102,474 and 50%, and lids at 65,200 tonnes and 32%) and count (with caps at almost 14bn and 37%, and lids at almost 13bn and 35%).

Seals have a lower proportion of the total in terms of weight than they do in terms of count, weighing 3,688 tonnes (2% of the total) but coming in at almost 4bn by count (10% of the total), as they are so light in comparison to other packaging types. Most seals are on milk / alternative and other dairy / alternative products.

Figure 4: Packaging/Product Categories by Cap and Closure Tonnage

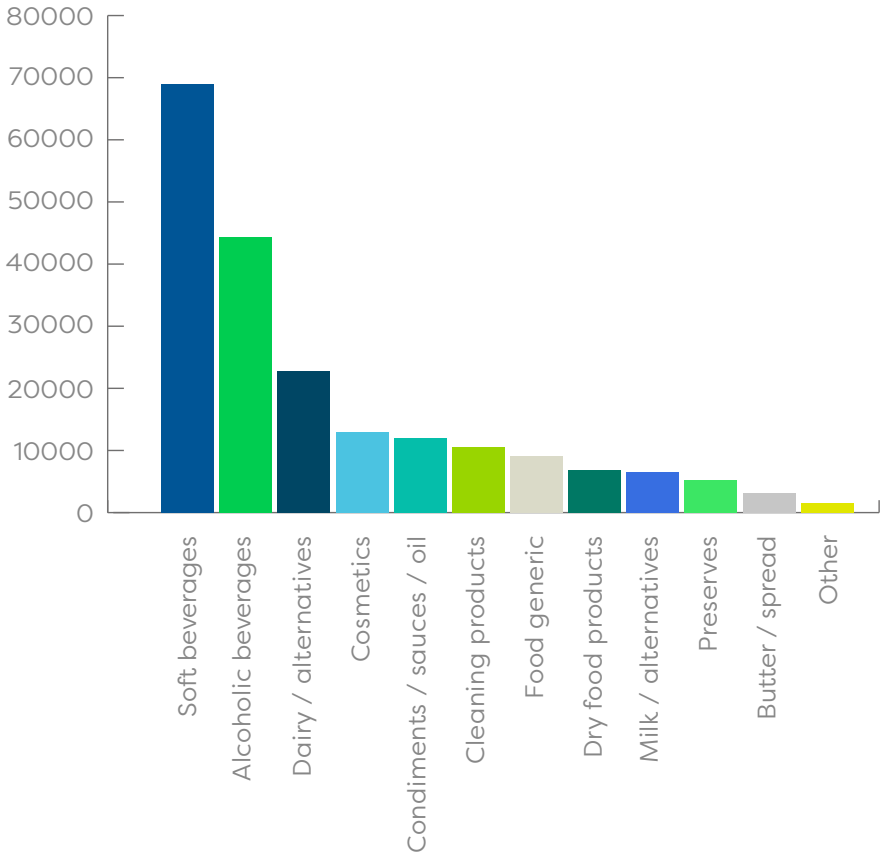


Figure 4 shows that soft beverages have the largest tonnage at 68,931 tonnes (34% of the total), followed by alcoholic beverages at 44,361 (22% of the total). We can therefore see that high sales of soft beverages are driving the prevalence of plastic caps.

Recycled Content

Until the implementation of the Plastic Tax in April 2022, there were no legal requirements in the UK to declare recycled content within packaging, and as a result data coverage is low.

Under the Plastic Tax, plastic packaging components with 30% or more recycled content are exempt from the tax, and any claimed exemptions must be supported with evidence . As such, collected data on recycled content is likely to increase.

For the packaging assessed within this analysis, 22% (by tonnage) had data on recycled content (inclusion as a percentage, or lack thereof). Of these 22%, 87% had no recycled content included and 13% did contain recycled content. When considering plastic specifically, 28% had data, of which 11% contained recycled content, and 89% did not.

The average amount of recycled content included in those components where data was available (and the content amount was not 0) was 67% for all materials, and 63% for plastic.

Potential

If the UK Plastics Pact target of 30% recycled content in all plastic packaging were reached, based on the above analysis showing a 2019 plastic total of 141,775 tonnes, this would constitute 42,533 tonnes of recycled content annually.

There are of course barriers to this, such as competition for recycled content and limits to use of recycled content in food-contact applications.



Limitations

Packaging component type entered during weights collection is subject to variability as, component type names are decided by the weight supplier / account manager upon input. These are subject to verification but there is no set distinction between what is a cap and what is a lid, for example.

Additionally, recycled content data coverage is not necessarily a representative sample, as suppliers may be more likely to supply recycled content data for packaging that contains it than packaging that doesn't.

[2] https://www.gov.uk/guidance/record-keeping-and-accounts-for-plastic-packaging-tax

[3] https://wrap.org.uk/taking-action/plastic-packaging/initiatives/the-uk-plastics-pact

For more information please contact us.

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