

# FIVE QUESTIONS TO ASK WHEN USING RECYCLED PLASTIC IN YOUR PRODUCTS

## Environmental sustainability support plastic packaging and products

### 1 Will the safety of my product be affected?

Not every type of recycled material works for every application and there are a number of regulations that influence the inclusion of recycled content into products such as food contact, healthcare and cosmetic. There are a myriad of regulations, legislation and technical requirements to consider when introducing or increasing the amount of recycled plastic in your products.

### 2 Will it affect the durability of my product?

Adding recycled materials into your products will reduce the overall material mechanical properties. In some cases this reduction cannot be tolerated, in others the product will still continue to function to its designed purpose satisfactorily. The amount of recyclate added, variability and purity of material needs to be considered when anticipating the overall product performance impact. A good starting point is a systematic technical risk assessment of recycled material.

### 3 Will it affect my manufacturing process?

Use of recycled material in place of virgin can reduce the overall carbon footprint of a product by up to 40%. Recycled plastic in the manufacturing process can impact operating parameters such as cycle time, temperature and pressure.

You may also need to consider ancillary equipment for mixing and dosing recyclate and assess if there are any transportation or load in storage implications.

### 4 How can I be sure of the quality of the recycled material, and where do I get it from?

Sourcing a steady stream of high-quality recyclate can be a challenge, with variations depending on factors such as location, material and availability. As brands and consumers increase their demand for recycled materials, it is important to evaluate and understand your supplier and their supply chains. Appropriate quality controls need to be in place and by assessing how the material was sourced, produced and processed you can gain a greater understanding of whether the material supplied meets your product specifications.

### 5 How much recycled content should I add?

It depends on the application and requirements of your product! You need to carry out an assessment of the potential impact on the performance properties of the product. This includes the quality of the recyclate, the match of the recycled plastic to the currently used material, its effect on mechanical and other critical properties such as appearance and colour. Start with an understanding of the product and how it's used, how it is manufactured and the requirements for its transportation and storage. Assessing the risks associated with your products and processes is the first step in evaluating the amount of recycled content to include.