Reducing Plastics and PVC in Packaging

Plastics have been a major packaging material for over 40 years. In the last 25 years, the use of plastics has come into question. As the millennial generation demands more attention to the environmental impact of consumer products, the need for plastic substitutes and replacements is growing.

Plastic-Free Packaging

There are three key methods to reduce the amount of plastic in a package:

1. **Reduce the size** of the package
2. **Reuse materials** to manufacture the package
3. **Create a recyclable package** by making the material components easy to separate for recycling systems to process

The Common Challenge

Oftentimes, environmentally-conscious brands struggle with creating a product-protecting package that can easily be separated for recycling processors. The separation of materials is essential for creating a truly recyclable package.

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Plastics are often still required to maintain specific package performance, but care must be taken to prevent the plastic from limiting the recyclability. To do so, the size or amount of plastic should be carefully controlled.

A good example of a mixed-materials package that retains its recyclability is a blister package. The blister package itself is plastic, and the backing, used as a print surface and hang tag, is paperboard. These materials can be easily separated, allowing for their individual recycling in most processing systems.

Poly-coated papers and poly-coated paperboards are examples of mixed-materials often used in packaging that are not recyclable. These products—commonly used as food wraps, like butcher paper, and in folding cartons for bakery items—are not recyclable. The poly and paper elements are

too closely bonded to be separated for recycling processors. Instead, we recommend using water-based coatings that can provide similar properties for paper and paperboard. Sierra Coating's water-based poly and PVC replacements can be customized to meet biodegradable requirements and are in compliance with EN 13432 regulations.

When to Reach Out to Sierra

When developing a new package, we recommend reaching out to our team during the design phase. Our chemists are available to help source the paper and chemical coatings to create a truly eco friendly package that meets your application needs.

Our partners are able to take full advantage of our contract and toll manufacturing capabilities. What this means is that our team will test run the substrates and paper for a package development project on our production machine. With this kind of testing, we can help develop packaging that functions correctly and the materials utilized will process correctly in production

To learn more about the steps you can take to make your packaging eco friendly, contact our chemical experts.