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Apple Rubber: EU Packaging Compliance Statement

At Apple Rubber, we are committed to sustainable business practices while strictly maintaining the high quality and cleanliness of our rubber components shipped to the European Union. We continuously review our packaging standards to align with European regulations, including Directive 94/62/EC and the updated EU Packaging and Packaging Waste Regulation (PPWR).

100% Virgin Polyethylene Bags

We utilize 100% virgin polyethylene (PE) bags for all parts, color-coded for easy identification: pink for medical device components and green for general industrial parts. Both feature a translucent finish.

- **Hygiene and Purity:** Recycled plastics can introduce contaminants. Because a large percentage of our shipments are critical medical device components, virgin polyethylene guarantees the purity required to maintain our ISO Class 7 cleanroom, USP Class VI, ISO 10993, and other medical product quality standards.
- **Exemptions and Sortability:** Medical safety and hygiene exemptions apply to these contact-sensitive requirements. Furthermore, the translucent tint of our bags ensures full compatibility with the EU's optical recycling sortation systems.
- **Double Bagging:** We use double polyethylene bags to provide a robust barrier between the cleanroom-level cleanliness of the internal parts, and external contamination. Every customer that assembles medical devices in a cleanroom requires parts to be double bagged.
- **Label Optimization:** Standard sticker labels can interfere with recycling sortation. To achieve strict compliance, we are aiming at upgrading our processes by researching PE-based, water-soluble labels or direct-bag inkjet printing.

Corrugated Cardboard Transport Boxes

We package our products in white exterior, double-wall corrugated cardboard boxes, minimizing cardboard content to reduce our environmental footprint.

- **Void Space Limits:** We intentionally limit excess space to meet the EU's maximum void space limit of 50% on transport boxes.
- **Damage Prevention:** While we avoid empty space, we do not package parts overly tight. Many medical customers use automated assembly processes, and light vacuum or tight packaging can severely deform delicate rubber parts, rendering them unusable.



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- **Heavy Metal Limits:** All box materials—including exterior bleach and branding inks—are certified to meet the EU's total heavy metal limits of 100 ppm.

Weight Minimization

In line with EU directives focused on source reduction, we utilize 4 mil thick polyethylene bags. This exact thickness is a functional necessity; thinner bags are more prone to tearing, which would compromise the cleanroom integrity of our medical components during transit.

Summary and Next Steps

Apple Rubber balances environmental responsibility with stringent product safety. Our ongoing action steps for EU compliance include:

- **Supplier Conformity:** Collaborating with packaging vendors to verify and document Declarations of Conformity, proving our bags and boxes meet all heavy metal and material restrictions.
- **Labeling Upgrades:** Transitioning to sustainable label alternatives to prevent interference with EU recycling streams.
- **Ongoing Monitoring:** Continuing to monitor updates to the EU Packaging and Packaging Waste Regulation to ensure all industry-specific requirements are met.

For more information on how we package our products, view <http://www.applerubber.com/hot-topics-for-engineers/packaging-of-rubber-parts-at-apple-rubber/>.