

Plastic Tubes

3 options of PE plastic

- Petroleum-based, virgin PE
- Post-consumer recycled, PCR PE
- Plant-based Green PE (by-product of sugarcane)



Five-layered co-extrusion plastic tube (PE-Adhesive-EVOH-Adhesive-PE)

EVOH is an excellent gas barrier and is also oil and solvent-resistant. By co-extruding PE with EVOH, the 5-layer tube benefits from the low permeability to oxygen and is mostly used for sensitive cosmetics and pharmaceuticals to prevent deterioration by contact with air.

Production process of Co-extrusion plastic



The production of plastic tube packaging is developed based on matured know-how and advanced equipment. As a result, companies benefit from a stable production rate and premium quality. Most companies opt for offset printing and silk screen printing for decoration. Both methods enable full surface decoration with high precision.

More customization options for plastic



Flexo-printing

It allows companies to print poster-quality images directly onto the full surface of plastic tubes.



Labeling

Vivid colored pattern is veiled with layered treatments for unlimited creative possibilities.



Hot stamping

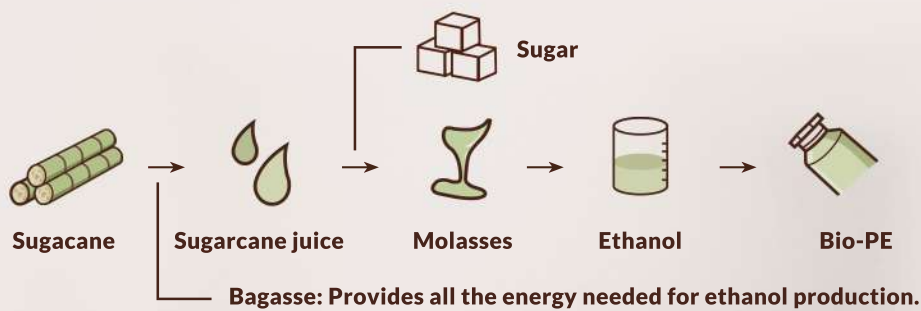
Metal foil film reveals a strong color definition with a metallic glow.

Biomass Plastic Packaging - Sugarcane Tubes

Fossil fuel is a limited natural source and will eventually run out. Hence, more and more renewable replacements are made available. For packaging production, Sugarcane-based PE is one credited substitution.

Made from the byproduct of sugarcane, plant-based Green Polyethylene (PE) is a bio-based polymer and a renewable source alternative to the oil-based polymer.

Extracting ethanol from sugarcane creates a viable plant-based polythene product suitable for the recycling mix and subsequent reuse.



Benefits of using Sugarcane Tubes (made of Bio-PE from the byproduct of sugarcane)

- Rid of food shortage concern. The raw material is the byproduct of sugarcane production and follows the EU's cascading principle for biomass uses.
- Compared to petroleum-based polyethylene production, Bio-PE reduces carbon dioxide emissions by up to 70%.
- Unlike exhaustible petroleum, it is viable to reproduce plant-based bio-PE with solar energy and water sources.
- Sugarcane Bio-PE retains a structure similar to polymers originating from the petrochemical route and is recyclable for post-consumer recycling.