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# DEVELOPMENT PROJECT SUPERTUBE

- Mono material: PE tube body, PE shoulder, PE closure
- Material reduction in the entire tube: 40% reduced wall thickness in the tube body, lightweight closure
- PCR material in the entire tube: 100% PCR in the tube, 50% PCR in the cap
- · HD printing and other printing techniques available



"Sustainability implemented consistently. And even in multiple dimensions at once." "An innovative solution by LINHARDT that should become the norm." Excerpt from the jury evaluation of the German Packaging Award (Company-internal translation)

# DEVELOPMENT PROJECT TOP TUBE



- ▶ 73% lighter closure, 73% reduced carbon footprint of closure\*
- ▶ Good recyclability thanks to Mono PE solution
- ▶ Available with reduced wall thickness
- Y Suitable for diameters 40 & 50 mm (30 & 35 mm planned) → Ideal for product lines with different tube sizes

More information



\* Comparison between Top Tube closure 1.96 g with standard fliptop closure 7.3 g, carbon footprint incl. HDPE, injection moulding and material transport

## TUBES WITH REDUCED WALL THICKNESS

- Possible wall thickness reductions: 350 μm (Ø 19 - 50 mm) → 30% material reduction 300 μm (Ø 19 - 30 mm) → 40% material reduction 270 μm (Ø 19 - 30 mm) upon individual technical feasibility study
- EVOH barrier possible
- Available as mono PE tube with PE closure
- PCR material possible
- HD printing and other printing techniques

IGHT

NEIGHT

30% or 40% material reduction in the tube body

#### **MONO-PE TUBES**

- Mono material: PE in tuben body, shoulder and closure for increased recyclability Development project: Mono PP tubes
- EVOH barrier possible
- · Reduced wall thickness possible
- PCR material possible
- HD printing and other printing techniques

▶ Fully recyclable mono material

### **PCR TUBES**

- High percentage of recycled plastic: Up to 100% PCR
- PCR tubes possible in transparent, white, coloured, or with pearl effect
- EVOH barrier possible
- Available as mono PE tube with PE closure
- Reduced wall thickness possible
- HD printing and other printing techniques
- Recycling cycle within Europe for reduced carbon footprint
- Broad choice of post-consumer recycled plastic materials
- Customized PCR rate configuration for different purposes



94% PCR

# LINHARDT SUSTAINABILITY GUIDE FOR PLASTIC TUBES

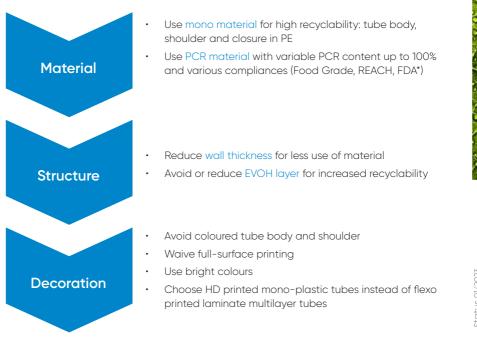
At LINHARDT, we create sustainable packaging solutions by following three main principles:

REDUCE: Reduction of the used material

REPLACE: Use of alternative, sustainable materials

RECYCLE: Use of recyclate or increase in recyclability

In order to make your specific plastic tube sustainable, we offer a wide range of configuration options:



\*Currently in qualification process

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