

## TOP TUBE LESS IS MORE





## DESCRIPTION

With our Top Tube material reduction is key. Unlike previous tubes, the shoulder of the Top Tube takes up the function of the cap's head plate. Thanks to the shoulder's specifically adapted shape, an additional material reduction in the shoulder could be realized. As a result, the weight of a 200 ml Top Tube with reduced wall thickness is cut by almost half compared to a standard tube\*.

## **TECHNICAL FEATURES**

- Material reduced fliptop cap with ring-shaped mounting to the shoulder: Head plate no longer necessary
- Combination of reduced tube wall thickness and high PCR content
- Diameters 40 and 50 mm. Diameters 30 and 35 mm will follow mid 2024
- Orifice diameter: 1.5 mm, 3 mm and 5 mm
- "Middle closina" system
- HDPE closure for higher recyclability
- PCR closure material in examination
- Tube printing in HD, silk-screen and offset printing
- Shoulder printing, alignment of closure to the artwork possible
- Mat or glossy cap

## YOUR ADVANTAGES

- Carbon footprint of 5.55 g CO2e per closure (vs. 20.77 g CO2e for standard fliptop cap diameter 50 mm) (incl. HDPE, injection moulding and material transport)
  - → 72% reduced carbon footprint of closure
- Significantly reduced weight
  - → 72% lighter closure: 2.01 g Top Tube cap vs. 7.3 g standard fliptop-cap Ø50
  - → ~15-20% material reduction in the tube shoulder
  - → Available with 270 300 350 um wall thickness
- High recyclability thanks to mono material approach: PE in tube and closure
- Improved restitution rate (98,8%) compared to alternative material reduced closures\*\*
- Significantly lower CO2 compensation costs compared to the current market
- Top Tube closure suitable for multiple tube diameters: 40 & 50 mm (and soon 30 & 35 mm)
  - → Ideal for product lines with different tube sizes
  - LINHARDT-exclusive patented solution

<sup>\*</sup> Ø 50 x 160 mm; Top Tube (300 um wall thickness): ~12.0 g vs. standard fliptop tube (500 µm): ~22.8 g

<sup>\*\*</sup> Ø 50 mm tubes with 200 ml shower ael