



Packaging for your life.



**MONO MATERIAL TUBE
POST-CONSUMER RECYCLED ALUMINIUM TUBE
WITH ALUMINIUM CLOSURE**

MONO MATERIAL PCR TUBES

CONSIDERING SUSTAINABILITY FROM START TO FINISH

Closed material loops are one of the most important topics of the packaging industry. In order to close these loops, it is necessary to create highly recyclable packagings. Aluminium can nearly infinitely be recycled without quality loss. The recycling process consumes only a fraction of the energy needed for primary production and thereby significantly reduces CO₂ emissions.

Plastic caps, however, cannot be recycled along with the aluminium tube and valuable raw materials are lost. We decided to change that:

Combining our PCR aluminium tube with an innovative LINHARDT aluminium closure maximizes the recyclability of your tube packaging.

YOUR BENEFITS AT A GLANCE

OUR CONTRIBUTION TO YOUR SUSTAINABILITY GOALS

- 100% PCR aluminium tube with recyclable aluminium closure
→ Contribution to a circular economy with >95% recyclability
- Lower Scope 3 emissions → lower potential CO₂ compensation costs
- No toxic substances (BPA NI)
- Closure suitable for cylindrical and conical tubes
- Food-grade PCR material in tube

BASIC VERSION

100% PCR ALUMINIUM TUBE

- Suitable for aluminium tubes with diameters 19 mm – 40 mm
- Tube thread M11 / Orifice 7 mm matched to closure
- Fill volumes 15 ml – 200 ml

100% ALUMINIUM SCREW CAP

- Diameter 14.5 mm
- PE layer for sealing
- Inhouse cap production



MULTIFUNCTIONAL VERSION

100% PCR ALUMINIUM TUBE

- Suitable for aluminium tubes with diameters 19 mm – 40 mm
- Thread M11 / Orifice 7 mm
- Fill volumes 15 ml – 200 ml
- Post-consumer recycled aluminium: 0.8 kg CO₂ / kg PCR aluminium slugs*

ALUMINIUM SCREW CAP

- Integrated piercer for membrane tubes
- Diameter 18 mm / Weight 0.75 g
- 6.09 kg CO₂ / 1,000 pcs., virgin aluminium
- Good form stability in closure
- Secure grip and easy opening thanks to the ribbed structure
- Closure available with transparent lacquer for aluminium look or white lacquer

Future options:

- Diameter 30 mm
- Coloured closures
- Use of PCR aluminium for a reduced carbon footprint of 1.00 kg CO₂ / 1,000 pcs.

By combining our PCR aluminium tubes with minimalistic and functional aluminium closures, LINHARDT and Alupak take care of your sustainability goals.



*Values based on quantities purchased in 2023

OUR APPROACH TO PCR ALUMINIUM

Post-consumer recycled aluminium, or PCR aluminium for short, is manufactured through the recycling of post-consumer aluminium scrap (waste after use). According to DIN EN ISO 14021, post-consumer scrap is material which can no longer be used for its intended purpose subsequent to its actual use. In this respect it is irrelevant whether the scrap comes from households, commercial, industrial, or institutional use.

LINHARDT PCR packaging contains 100% post-consumer recyclate made from end-of-life aluminium scrap like cable wires or lithographic plates. This way, the resource intensive effort of collecting, sorting and cleansing needed for packaging-to-packaging recycling can be significantly reduced. In addition, these sources of PCR are characterized by a high material availability and thus supply reliability. The supply chain is transparent and traceable.

