K-POD

Product:
K-Pod: injection moulded industrial compostable biopolymer capsule with high oxygen barrier

Capsule Material

- The material of our K-Pod capsule is a biopolymer in the sense of the regulation EU 10/2021
- The basic material used is based on renewable raw materials (>96%)
- All monomers contained in our biopolymer have already been approved by the EFSA (European Food Safety) and are known.
- The material, as well as the capsules made from it, are free from aluminum
- All materials used are GMO and Pesticide-free

Production

- Country: Germany
- According to quality standard ISO 9001 (2015) and the hygiene regulation DIN EN15593/2008
- From certified renewable energies

Capsule

OTR	0.0010 cm^3 / capsule / day (0.21 bar - @23°C, 50% RH)
WVTR	0.0190 g / capsule / day (@23°C, 85% RH)
Height	44.2 ± 0.2 mm
Outer diameter	50.8 ± 0.2 mm
Weight	4.2 ± 0.3 g
Wall thickness	0.45 ± 0.1 mm
Volume	approx. 54.6 cm^3
Inner surface of the capsule body	approx. 65.5 cm^2

Capsule Colors

- Bio Green

All information is subject to technical changes

Storage

- Unfilled - storable for up to 18 months
  - Relative humidity of up to 60%
  - Temperature range: +5°C to +35°C
- Filled - shelf life of 12 months if using the recommended lid and ensuring a hermetic sealing

Logistics

- Packaging unit: 2500 pieces per carton with a PE liner in stacks of 100 (5 rows in 5 layers)
- Pallet: one-way pallet: 114x80cm with 36 cartons (European)
- Total weight per pallet approx. 400 kg
- During transportation Max. allowable temperature peek -10°C to 65°C

Food Contact

- FDA for US approved

Environmental Certifications

BPI COMPOSTABLE — COMMERCIALLY COMPOSTABLE ONLY. FACILITIES MAY NOT EXIST IN YOUR AREA. CERT #10528936

COMPOST MANUFACTURING ALLIANCE — COMPOSTER APPROVED — CMA-W

USDA CERTIFIED BIOBASED PRODUCT — PACKAGE 61%

Carbon neutral Product — ClimatePartner.com/14442-2003-1001

LID WELDING PARAMETERS K-POD

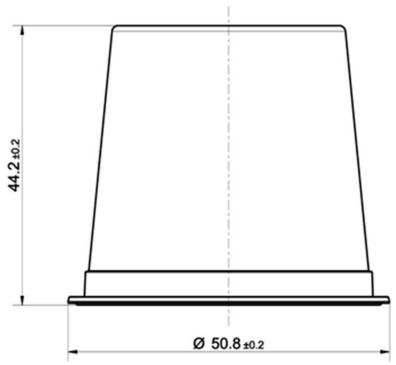
Product:
Parameters determined under lab conditions for welding of the **TL-P** lid to the K-Pod

Thermal pre-welding

Temperature	~ 190°C
Welding duration	100 ms
Pre-weld force	~ 700 N

Ultrasonic welding

Frequency	35 kHz
Amplitude	26 µm
Welding duration	350-450 ms
Holding duration after welding	50 ms
Trigger force	~ 70 N
Welding force	~ 300 N



Maximum wall thickness offset = 0.1mm
Stacking height ≈ 5mm

Baugruppennr: | Projektnr.
Baugruppenname: | Projektname
Oberflächen n. DIN 1302 | Maßstab | Dosname | Format A4
Freimaßtoleranzen m. DIN 7168 fein | Schutzvermerk ISO 16016 beachten! | Positionsnr
Bearb. 10.01.2022
Gepr.
Norm
Plot
K-POD
Smile Compostable Solutions
Zeichnungsnummer: **K-POD V1** | Blatt
Index | Änderung | Datum | Name

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