



periamyl[®] IMG105TSC

Description

periamyl[®] is a thermoplastic natural material based on starch. It is biodegradable, home compostable, free of mineral oils and mineral oil-based additives, and water-soluble. In addition, it has been optimized for processing on unmodified injection molding machines. Its properties make it particularly suitable for packaging and other injection-molded articles where value is placed on CO₂ neutrality, absence of microplastics and biodegradability.

Technical data

Mechanical Properties	Typical value	Test method
Tensile modulus (1 mm/min)	6460 MPa	ISO 527-1/2
Stress at break (10 mm/min)	45 MPa	ISO 527-1/2
Elongation at break (10 mm/min)	0.9%	ISO 527-1/2
Flexural modulus (2 mm/min)	11400 MPa	ISO 178
Charpy notched impact strength	0.8 kJ/m ²	ISO 179/1eA
Charpy impact strength	4.6 kJ/m ²	ISO 179/1eU
Shore D hardness	80	ISO 868

Physical Properties	Typical value	Test method
Density	1,4 g/cm ³	

Other Properties		Testmethode
Biogenic carbon	99 %	ASTM D 6866

Operation instructions

Before processing, the granulate should be dried for approx. 4 h at 80°C. For optimal processing, the residual moisture is less than 1%. The processing temperature is between 190°C and 210°C. The material should only be heated above 200°C for a very short time. periamyl[®] has a low shrinkage (usually less than 0.5 %), keep the holding pressure as low as possible.

Storage

periamyl[®] should be stored dry, at temperatures below 50 °C and protected from strong UV light. Incorrect storage may have negative effects on mechanical and other properties of the product.