

Arnite®A04 700

Polyethylene Terephthalate

DSM Chemicals

Technical Data

Product Description

Medium Viscosity, Nucleated, Food Contact Quality

General

Additive	• Nucleating Agent		
Features	• Food Contact Acceptable	• Medium Viscosity	• Nucleated
Processing Method	• Injection Molding		
Multi-Point Data	• Isothermal Stress vs. Strain (ISO 11403-1)		
Resin ID	• PET		

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.27 g/cm³	ASTM D792
Molding Shrinkage - Flow	0.20 to 0.50 %	ASTM D955
Mechanical	Nominal Value Unit	Test Method
Tensile Strength		
Yield	44.6 MPa	ASTM D638
Yield	49.0 MPa	ISO 527-2
Break	29.4 MPa	ASTM D638
Break	30.0 MPa	ISO 527-2
Tensile Elongation		
Yield	4.5 %	ASTM D638
Yield	4.1 %	ISO 527-2
Break	250 %	ASTM D638
Break	240 %	ISO 527-2
Flexural Modulus		
--	2160 MPa	ASTM D790
--	1800 MPa	ISO 178



Arnite®A04 700

Polyethylene Terephthalate

DSM Chemicals

Mechanical	Nominal Value Unit	Test Method
Flexural Strength		
--	74.0 MPa	ASTM D790
--	64.0 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	110 J/m	ASTM D256
23°C	7.3 kJ/m²	ISO 180
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	108	ASTM D785
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed	70.0 °C	ASTM D648
0.45 MPa, Unannealed	72.0 °C	ISO 75-2/B
1.8 MPa, Unannealed	62.0 °C	ASTM D648 ISO 75-2/A
Optical	Nominal Value Unit	Test Method
Light Transmittance	90.0 %	ASTM D1003
Haze	< 1.00 %	ASTM D1003

