

ORFITRANS™ PETG

Thermoforming conditions

Activation temperature (IR-oven)	160 (320)	°C (°F)
Activation time - sheet thickness 8 mm	8	min
Activation time – sheet thickness 10 mm	9m30	min
Activation time – sheet thickness 12 mm	12	min
Activation time - sheet thickness 15 mm	15m30	min
Activation time – sheet thickness 20 mm	23	min
Maximum shrinkage during activation	0.2 – 0.5	%
Maximum thermal shrinkage during cooling	n.a.	%

Mechanical properties at 21°C

Flexural modulus	1510	MPa
Aging: reduction of flexural modulus after UV-lighting for 210 h	n.a.	%
Elastic modulus	606	MPa
Tensile strength	42.2	MPa
Strain at break	84	%
Shore D hardness	76	
Impact resistance (Charpy Unnotched)	no break	

General properties

Density	1.27	g.cm ⁻³
Degradation temperature	+300 (+572)	°C (°F)
Color	transparent	
Odor	none	
Biocompatible	yes	

INFORMATION

The flexural modulus indicates the material stiffness in bending.

Aging: the indicated time (h) denotes the start of yellowing in an aging accelerator. 250 h equals 1 year of solar energy in Belgium.

The elastic modulus indicates the material stiffness in tensile.

The tensile strength is the pulling force required to break the material.

The strain at break is the length increase of the material when stretched until failure.

The hardness indicates the resistance of the material to compression.

The impact resistance is the susceptibility of the material to fracture under stresses applied at high speeds.

The degradation temperature is determined in helium.

The biocompatibility is studied according the guidelines of the International Organization for Standardization 10993 – Biological Evaluation of Medical Devices:

- Primary skin irritation study.
- Delayed dermal contact sensitization study.
- Cytotoxicity study.

Note:

Although the information in this publication is believed to be accurate and reliable, the data shown are for guidance only. Orfit Industries gives no guarantees about the results and assumes no liability in connection with them. The properties reported here are intended primarily to facilitate comparison among Orfit products. Standard testing methods often allow alternative measuring methods. Therefore, data from other sheet manufacturers may not be directly comparable. For additional information, please contact Orfit Industries.



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Ref.: 80205 – ORFITRANS PETG.docx
VERSION 4

LAST UPDATE: 30/08/2023