TECHNICAL DATA SHEET

ORFITRANS™ EXTRA SOFT

Thermoforming conditions		
Activation temperature	150 (300)	°C (°F)
Activation time - sheet thickness 9 mm (23/64”)	11	min
Activation time - sheet thickness 12 mm (1/2”)	14	min
Maximum shrinkage during activation	3.2	%
Maximum thermal shrinkage during cooling	1.6	%
Mechanical properties at 21°C		
Flexural modulus	30	MPa
Aging: reduction of flexural modulus after UV-lighting for 210 h	11.1	%
Elastic modulus	26	MPa
Tensile strength	10	MPa
Strain at break	800	%
Shore D hardness	33	
Impact resistance	no break	
General properties		
Density	0.95	$g.cm^{-3}$
Degradation temperature	230 (446)	°C (°F)
Color	semi-transparent	
Odor	acid smell	
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:

ORFITRANS™ EXTRA SOFT BEIGE

Thermoforming conditions		
Activation temperature (IR oven)	150 (300)	°C (°F)
Activation time – sheet thickness 5 mm (13/64") – flat in oven / no bubble formation	4.5	min
Activation time - sheet thickness 9 mm (23/64")	7	min
Activation time - sheet thickness 12 mm (1/2")	9.5	min
Maximum shrinkage during activation	3.2	%
Maximum thermal shrinkage during cooling	1.6	%
Mechanical properties at 21°C		
Flexural modulus	30	MPa
Aging: reduction of flexural modulus after UV-lighting for 210 h	11.1	%
Elastic modulus	26	MPa
Tensile strength	10	MPa
Strain at break	800	%
Shore D hardness	33	
Impact resistance	no break	
General properties		
Density	0.95	$g.cm^{-3}$
Degradation temperature	230 (446)	°C (°F)
Color	beige	
Odor	acid smell	
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: