

# **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 <sup>-3</sup>
Degradation temperature	230 (446)	°C (°F)
Color	semi-transparer	nt
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:

- o Primary skin irritation study.
- o 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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LAST UPDATE: 05/12/2019



# **ORFITRANS™ EXTRA SOFT BEIGE**

ivation time – sheet thickness 5 mm (13/64") – flat in oven / no bubble formation ivation time - sheet thickness 9 mm (23/64") ivation time - sheet thickness 12 mm (1/2") ivation time - sheet thickness 12 mm (1/2") ivation shrinkage during activation ivation thermal shrinkage during cooling ivation chanical properties at 21°C	50 (300) 4.5 7 9.5	°C (°F) min
ivation time - sheet thickness 9 mm (23/64") ivation time - sheet thickness 12 mm (1/2") ximum shrinkage during activation ximum thermal shrinkage during cooling chanical properties at 21°C	7	min
ivation time - sheet thickness 12 mm (1/2") ximum shrinkage during activation ximum thermal shrinkage during cooling chanical properties at 21°C	•	
ximum shrinkage during activation ximum thermal shrinkage during cooling chanical properties at 21°C	0.5	min
ximum thermal shrinkage during cooling  chanical properties at 21°C	5.5	min
chanical properties at 21°C	3.2	%
	1.6	%
cural modulus	30	MPa
ng: reduction of flexural modulus after UV-lighting for 210 h	11.1	%
stic modulus	26	MPa
sile strength	10	MPa
ain at break	800	%
re D hardness	33	
pact resistance n	no break	
neral properties		
nsity	0.95	g.cm <sup>-3</sup>
gradation temperature 2	30 (446)	°C (°F)
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LAST UPDATE: 05/12/2019