

Handelsname: Stiff Connect

	Stiff Connect
Thermoforming conditions	
Activation temperature	170 (340) °C (°F)
Activation time - sheet thickness 6 mm	17 min
Activation time - sheet thickness 8 mm	20 min
Activation time - sheet thickness 10 mm	25 min
Activation time - sheet thickness 12 mm	28 min
Activation time - sheet thickness 15 mm	40 min
Maximum shrinkage during activation	3.5 %
Maximum thermal shrinkage during cooling	0.8 %
Mechanical properties at 21 °C	
Flexural modulus	1150 MPa
Aging: reduction of flexural modulus after UV-lighting for 210 h	0.7 %
Elastic modulus	1300 MPa
Tensile strength	26 MPa
Strain at break	250 %
Shore D hardness	68
Impact resistance	no break
General properties	
Density	1.01 g.cm ⁻³
Degradation temperature	300 (572) °C (°F)
Color	blue-transparent
Odor	no 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. 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.