

Notes* on the areas of application and temperature recommendations** for thermoplastics

<p>This table shows the ideal heating temperature for each type of plastic. * This information applies only to thermoplastics by Otto Bock HealthCare GmbH in Duderstadt, Germany. ** The temperatures specified here are only recommendations by Otto Bock HealthCare GmbH and must be modified to suit your individual heating devices. ***Thermolyn Pedion must be heated in a bath of water at 60 °C. For more information, please consult the OTTOBOCK Materials Catalogue (646K1=GB) and the Ottobock Information for Practitioners – SKINGUARD Thermoplastics and Lamination Resins for Prosthetics and Orthotics (646D119=GB).</p>																	<p>Special Characteristics/ Areas of Application</p>			<p>Heating plate</p>	<p>Convection oven</p>	<p>Infrared oven</p>
Application Examples/ Product Names	chemical composition	FO	DAFO	AFO	Nighttime splint	Test KAFO	KAFO	Orthosis bracket	Wrist orthosis	Corset with pads (TLSO)	Prosthetic check socket	Soft sockets	Harmony socket	Prosthetic inner socket	Inner socket for upper limb prosthesis							
Thermolyn Pedion 616T73	NTT polyester															<p>Ideal for clinical use! mobile application possibilities, thermoflexible at low temperatures, can be applied directly on the body, elaborate plaster casting and modelling work is eliminated, high adhesive strength, high restoring capacity upon reheating</p>	***					
Thermolyn Trolen 616T3	PE-LD															<p>good transparency, good thermoformability and flexibility, low molecular weight, especially well suited for orthosis components that require low stiffness but high flexibility, suitable for the fabrication of brackets in socket technology applications</p>	125 °C/ 257 °F	125 °C/ 257 °F	125 °C/ 257 °F			
Thermolyn PP-C 616T120	PP-C															<p>good stiffness, low weight, increased impact strength at low temperatures, low tendency to white crack, good adaptation to orthosis joints, favourable welding characteristics, low shrinkage, easy to dye with Ottobock Thermopaper</p>	215 °C/ 419 °F	185 °C/ 365 °F	185 °C/ 365 °F			
Thermolyn PP-H 616T20, 616T56	PP-H															<p>high rigidity and stiffness, high thermoplastic dimensional stability, reduced impact value, easy to dye with Ottobock Thermopaper, especially well suited for orthosis components subject to extreme strain, e.g. paralysis orthoses</p>	215 °C/ 419 °F	185 °C/ 365 °F	185 °C/ 365 °F			
Thermolyn PE 200 616T19, 616T58, 616T60, 616T61, 616T95	PE-HD 200															<p>hard polyethylene, good thermoformability, readily weldable, good grinding characteristics, easy to dye with Ottobock Thermopaper, low shrinkage, can be combined with materials such as Plastazote®</p>	180 °C/ 365 °F	165 °C/ 329 °F	165 °C/ 329 °F			
Thermolyn RCH 500 616T22, 616T43, 616T44	PE-HD 500															<p>homogenous thermoplastic, high stiffness, adequate welding characteristics, good heating behaviour, good grinding characteristics, low shrinkage, can be used with the 501A33 Joint Screws and the 505L1 Joint Bolts as an overlapped joint with orthosis bushings</p>	195 °C/ 383 °F	185 °C/ 365 °F	185 °C/ 365 °F			
Thermolyn RCH 1000 616T16	PE-HD 1000															<p>high-strength material, high abrasion resistance, requires heavy deformation forces in the thermoplastic state, can also be reshaped cold, thermoflexing is made easier with the use of vacuum forming equipment with rubber membrane, frequently used as a stiffening insole for inner shoes</p>	215 °C/ 419 °F	195 °C/ 383 °F	195 °C/ 383 °F			
Thermolyn rigid 616T52	Polystyrene															<p>high stiffness, high thermoplastic dimensional stability, high resistance against the formation of stress cracks, extremely high impact strength, good thermoformability, can be over-laminated to secure adapters, for the fabrication of self-supporting check sockets (limited duration of use)</p>	–	170 °C/ 338 °F	170 °C/ 338 °F			
Thermolyn clear 616T83	Copolyester															<p>good transparency, high impact strength, outstanding thermoformability, post-forming is possible by reheating, e.g. with a hot air gun, may be over-laminated to secure adapters, low shrinkage, for the fabrication of self-supporting check sockets and trial fitting orthoses (limited duration of use)</p>	165 °C/ 329 °F	165 °C/ 329 °F	165 °C/ 329 °F			
Thermolyn PETG clear 616T83	Copolyester															<p>extremely high impact strength, excellent thermoformability, outstanding socket adhesion, protection of the liner, used as the 1st layer in definitive sockets, easy to put on with liner/soft socket, for example as part of the Harmony fitting</p>	–	170 °C/ 338 °F	160 °C/ 320 °F			
Thermolyn flexible 616T39, 5Z3	Ionomer															<p>proven classic for frame sockets! resistant against cold and damp plaster models, high surface quality, high form stability, comfortable to wear, readily washable, low shrinkage, for the fabrication of flexible lower limb prosthetic sockets</p>	–	165 °C/ 329 °F	165 °C/ 329 °F			
Thermolyn soft (EVA), colourless 616T53	EVA															<p>high surface quality, subsequent thermoformability, comfortable to wear, readily washable, major shrinkage if cooled too quickly, for the fabrication of flexible lower limb prosthetic sockets</p>	–	160 °C/ 320 °F	160 °C/ 320 °F			
Thermolyn soft (EVA), skin-coloured 616T69	EVA															<p>translucent, high surface quality, subsequent thermoformability, comfortable to wear, readily washable, major shrinkage if cooled too quickly, for the fabrication of flexible lower limb prosthetic sockets</p>	–	160 °C/ 320 °F	160 °C/ 320 °F			
Thermolyn supra soft (EVA) 616T59	EVA															<p>comfortable to wear, readily washable, for the fabrication of highly flexible transfemoral soft-walled inner sockets</p>	–	155 °C/ 311 °F	155 °C/ 311 °F			
Thermolyn supra soft plus silicone 616T111	EVA with silicone															<p>very high flexibility, facilitates a more comfortable socket edge design, high surface quality, comfortable to wear, easy to grind, washable</p>	–	150 °C/ 302 °F	150 °C/ 302 °F			
Thermolyn Europlex 616T70	Polyamide															<p>good transparency, smooth surface, low hardness with improved durability, for the fabrication of shape-retaining components, insoles and pads for spinal orthoses</p>	–	135 °C/ 275 °F	135 °C/ 275 °F			
<p>Thermoplastics with antibacterial/antimicrobial effect SKINGUARD technology</p>																						
Antibacterial ThermoLyn PP-H 616T420	PP-H															<p>high rigidity and stiffness, high thermoplastic dimensional stability, reduced impact value, easy to dye with Ottobock Thermopaper, especially well suited for orthosis components subject to extreme strain, e.g. paralysis orthoses</p>	215 °C/ 419 °F	185 °C/ 365 °F	185 °C/ 365 °F			
Antibacterial ThermoLyn PE 200 616T495	PE-HD 200															<p>hard polyethylene, good thermoformability, readily weldable, good grinding characteristics, easy to dye with Ottobock Thermopaper, low shrinkage, may be combined with materials such as Plastazote®</p>	180 °C/ 365 °F	165 °C/ 329 °F	165 °C/ 329 °F			
Antibacterial ThermoLyn rigid 616T252	Polystyrene															<p>high stiffness, high thermoplastic dimensional stability, high resistance against the formation of stress cracks, extremely high impact strength, good thermoformability, can be over-laminated to secure adapters, for the fabrication of self-supporting test sockets (limited duration of use)</p>	–	170 °C/ 338 °F	170 °C/ 338 °F			
Antibacterial ThermoLyn clear 616T283	Copolyester															<p>good transparency, high impact strength, outstanding thermoformability, post-forming is possible by reheating, e.g. with a hot air gun, may be over-laminated to secure adapters, low shrinkage, for the fabrication of self-supporting check sockets and trial fitting orthoses (limited duration of use)</p>	165 °C/ 329 °F	165 °C/ 329 °F	165 °C/ 329 °F			
Antibacterial ThermoLyn PETG clear 616T483	Copolyester															<p>extremely high impact strength, excellent thermoformability, outstanding socket adhesion, protection of the liner, used as the 1st layer in definitive sockets, easy to put on with liner/soft socket, for example as part of the Harmony fitting</p>	–	170 °C/ 338 °F	160 °C/ 320 °F			
Antibacterial ThermoLyn soft (EVA), colourless 616T253	EVA															<p>high surface quality, subsequent thermoformability, comfortable to wear, readily washable, major shrinkage if cooled too quickly, for the fabrication of flexible lower limb prosthetic sockets</p>	–	150 °C/ 302 °F	150 °C/ 302 °F			
Antibacterial ThermoLyn soft (EVA), skin colour 616T269	EVA															<p>no impairment of the physical characteristics and processing properties by the addition of the antibacterial and antimicrobial substances</p>	–	150 °C/ 302 °F	150 °C/ 302 °F			
Thermolyn EVA/LDPE SilverShield® 616T200	EVA/LDPE															<p>flexible material, pleasant wearing characteristics and skin comfort, low shrinkage since pressed synthetic material, for the fabrication of flexible prosthetic sockets</p>	–	150 °C/ 302 °F	150 °C/ 302 °F			
Pedilin SilverShield® 617S203	PE foam, closed-cell															<p>not perforated, density 140kg/m³, hardness approx. shore A 35, good padding characteristics, highly elastic, good adhesive characteristics, good sanding characteristics, washable, for padding FOs, individual padding when indicated for heel spur, for fitting diabetics</p>	–	130 °C/ 266 °F	130 °C/ 266 °F			
Antimicrobial Nora® Lunairmed 617S229	EVA copolymer, closed-cell															<p>density of 80 kg/m³, hardness approx. shore A 18, good padding characteristics, highly elastic, good adhesive characteristics, good sanding characteristics, washable, for padding FOs, individual padding when indicated for heel spur, for fitting diabetics</p>	120 – 130 °C/ 248 – 266 °F	120 – 130 °C/ 248 – 266 °F	–			