

Information* on the Characteristics and Material Combinations of Adhesives, Putties, Varnishes and Thinners

Product description		General Characteristics							Special Characteristics/ Areas of Application	Possible Material Combinations														Product description								
Chemical basis		Area of application °C/°F	Pot life (2K products, depending on mixing ratio)	Drying time **	Handling strength **	Final strength **	Colour of the glue joint	Bonding process		Polyurethane	Polyethylene	Polypropylene	PPT	EVA	GRP	Rubber	Textiles	Felt	Wood	Laminate	Leather	Cork	PU foams rigid	PU foams soft	PE foams	Metal	Hard PVC	Soft PVC	Neoprene			
	Parchment Cold Adhesive 636W9 Polyvinyl acetate						Transparent	Wet	also for low processing temperatures, average setting time																							
	Universal Adhesive 636W1 Cellulose					approx. 8 h under pressure	Transparent	Contact and wet	water and perspiration-resistant, contact adhesion for closed-pore materials, suitable thinner 634A1																							
	Contact Adhesive 636N9 Methyl acetate	up to approx. +100 °C/ +212 °F		15–20 min.			Yellowish	Contact	bonding flexible materials including plastics and metals, good resistance to ageing, suitable thinner 634A6																							
	Special Adhesive for Bandages 636N10 Homopolymer polyvinyl acetate dispersion, approx. 63% in water			30–60 min.		approx. 2 days	Transparent	Contact and wet	very flexible adhesive film, limited suitability for soft PVC or sole bonding, contact adhesion for closed-pore materials																							
	Plastic Adhesive 636W17 Polyurethane			10–20 min.			Transparent	Contact and wet	heat activation possible even after several days, suitable for bonding fatty leather and to solidify foam cosmetic covers contact adhesion for closed-pore materials, suitable thinner 634A20																							
	PU (Polyurethane) Adhesive 636W25 Polyurethane synthetic solution	from +80 °C/ +176 °F to +120 °C/ +248 °F	approx. 8 h	approx. 10 min.		approx. 24 h		Contact	for high-strength and flexible bonding, heat-resistant to 120 °C/248 °F in combination with 636W26 Cross-Linking Agent, heat activation possible (+80 °C/+176 °F), suitable thinner 634A23																							
	Contact Adhesive 636W45 Polychloroprene	from -30 °C/ -86 °F to +120 °C/ +248 °F		10–15 min.		approx. 48 h	Yellowish transparent	Contact	for flexible bonding, suitable thinner 634A59																							
	Neoprene Adhesive 636W65 Polychloroprene			7–45 min.		1–2 h	Brown	Contact	especially for neoprene, suitable thinner 634A67																							
	CP Contact Adhesive 636W71 Polychloroprene, colophonium	with 5–10% hardener up to 8 h		10–60 min.		2–3 days		Contact	especially for orthopaedics technology, bonds are more flexible than with 636W72 CR Contact Adhesive, toluol-free, also suitable as a dual-component system to increase heat-resistance, suitable universal thinner 634A71																							
	CR Contact Adhesive 636W72 Polychloroprene	with 5–10% hardener up to 8 h		15–120 min.		3–5 days	Transparent	Contact	especially for orthopaedic footwear technology, toluol-free, also suitable as a dual-component system to increase heat-resistance, suitable universal thinner 634A71																							
	Orthocryl Sealing Resin Compact Adhesive 636K18 Solution of an acrylic polymer in methacrylic esters	depends on the mixing ratio				depends on the mixing ratio	Transparent	Wet	used with 617P14 Hardener Paste or 617P37 Powder																							
	UHU Hard (dual-component system) 636W22 Cellulose nitrate	up to approx. +100 °C/ +212 °F				approx. 24 h	Transparent	Wet	fast-drying, soluble with 634A3 Acetone																							
	Rubber Adhesive 636W34 Polychloroprene	from -30 °C/ -86 °F to +90 °C/ +194 °F		5–15 min.			Beige	Contact	for flexible and heat-resistant bonding, can be applied with a brush or spatula																							
	UHU Plus, final strength 300 (dual-component system) 636W23 Bisphenol-A epoxy resin (A), polyaminoamide (B)	from -40 °C/ -104 °F to +80 °C/ +176 °F	approx. 90 min.		approx. 6 h	approx. 5 days	Opaque/ honey-coloured	Wet	the higher the setting temperature (up to approximately 180 °C/380 °F), the higher the strength of the bond; also hardens when not exposed to air																							
	Two Component High-Performance Adhesive 636M2 Epoxy resin and pigments (A), polyaminoamide (B)		50–80 min.		approx. 12 h	approx. 7 days		Wet	for high-strength bonding																							
	Special Adhesive 636W18 Epoxy resin and pigments (A), polyaminoamide (B)		50–70 min.		approx. 10 h			Wet	especially for splint systems, highest strength when hardening between 40 – 120 °C/104 – 248 °F, used with 636W19 Hardener Paste																							
	Cyamet Rapid Adhesive (Superglue) 636K11 Ethyl	from -30 °C/ -22 °F to +80 °C/ +176 °F		5–70 sec.		approx. 24 h	Transparent	Wet	setting is accelerated by humidity, suitable for almost all material combinations, high mechanical strength, patented twist-off dosage cap																							
	Cyanacrylate Rapid Adhesive as Dosage Pen 636K36 Ethyl	from -30 °C/ -86 °F to +80 °C/ +176 °F		3–50 sec.			Transparent	Wet	dosage pen with twist-off cap, precise gluing with accurate dosage, universal product of average viscosity, high tensile strength, quick-setting standard grade for various applications including ceramics																							
	Spray Adhesive (removable) 636K40 Synthetic elastomers	from -20 °C/ -4 °F to +50 °C/ +122 °F		up to 5 minutes			Transparent	Wet	for joints that can be disassembled and repositioned, UV-resistant, fine and evenly distributed adhesive application, precise and clean during use																							
	Spray Adhesive (permanent) 636K41 Synthetic elastomers	from -30 °C/ -22 °F to +50 °C/ +140 °F		up to 10 seconds			Beige	Contact	for permanent bonding, universal, long gluing time, does not penetrate porous materials nor sag, fine and evenly distributed adhesive application																							
Putties																																
	Orthocryl Putty 636K7 Polyester resin solution in methyl methacrylate	from +80 °C/ +176 °F to +130 °C/ +226 °F		5–13 min.			Grey		for securing and filling various materials, used with 617P14 Hardener Paste																							
	Akemi Fast-Curing Putty 636K9 Unsaturated polyester resins dissolved in styrene	up to approx. +100 °C/ +212 °F		2–6 min.		15–30 min.			fast-curing, good adhesion and elasticity, for securing and filling various materials, used with 617P14 Hardener Paste																							
	Light Putty 636K17 Unsaturated polyester resins with special light fillers dissolved in styrene			3–7 min.		20–40 min.			fast-curing, very low density, good adhesion, good grinding characteristics for securing and filling various materials, can be coloured with Ottobock colour pastes, used with 617P14 Hardener Paste																							
	Plastic Wood 636K3 Acetone, nitrocellulose, camphor, titanium dioxide	from -10 °C/ -50 °F to +80 °C/ +176 °F				5–15 min.			for filling holes, cracks and irregularities in wood, can be sanded after approximately 15 min., desired viscosity can be restored using 634A1 Thinner																							
Varnishes																																
	Special Varnish, transparent 635L2 Cellulose						Transparent		socket interior and exterior varnish, varnishing pergamented prostheses and other wood and metal components, suitable thinner 635L2																							
	Socket Interior Varnish, transparent 635L8 Acrylic						Transparent		interior socket varnish, physiologically neutral and suitable for sensitive skin																							
	Orthocryl Varnish, colourless 635L12 Synthetic binding agent and solvent								for the isolation of wet plaster models, and for varnishing sanded laminate surfaces																							
	Orthocryl Spray Varnish, clear 635L14 Toluol-acetone-xylol solvent mixture						Transparent		for smoothing and repairing sanded laminate, CFC-free spray can																							
	Spray Varnish, skin-coloured 635L13 Pigment binding agent spray varnish						Skin colour		for coating sanded laminates, CFC-free spray can																							
	Spray Varnish, dark brown 635L16 Pigment binding agent spray varnish						Dark brown		for coating sanded laminates, CFC-free spray can																							
	Dipping Varnish 635L15 Polyurethane						Dark brown		for colouring Pedilan casting forms, e.g. feet																							
Cleaners/Thinners																																
	Acetone 634A3 Acetone, dimethylketone						Transparent		very volatile, with extremely good solvent characteristics for nitrocellulose, polyester, polystyrene, PVC copolymers, alkylid resins, fats, oils and waxes, good degreasing characteristics																							
	Isopropyl Alcohol 634A58 Dimethylcarbinol, 2-hydroxypropan, 2-propanol						Transparent		for cleaning sensitive plastics such as PVC, PS, ABS, acrylic, PC																							

● can be bonded in combination ● base materials that cannot be combined

In view of the numerous possible applications of adhesives, putties, varnishes and thinners, we can only provide general information in this overview. The suitability of these products for your specific purpose – also in regards to your processing technique, the characteristics of the materials being bonded and the subsequent types of strain on the glue joint – needs to be verified by your own practical tests.

Vapours and gases generated during the processing and storage of adhesives, which may be hazardous to health, must be extracted using suitable systems. Ottobock lamination workstations have proved suitable for extracting these hazardous substances. Gases, vapours and suspended particles are extracted with the help of a fan and the suspended particles are caught with an integrated filter. More about the Ottobock lamination workstations can be found in the Planning and Equipping Catalogue (646K10-GB).

Please also observe the notes on processing and storing adhesives which are found on the containers of the Ottobock products. We also offer suitable secure cabinets in order to ensure hazardous substances are stored properly.

Safety data sheets are available for materials that require labelling according to the Ordinance on Hazardous Substances. These EU safety data sheets (SBD) or Material Safety Data Sheets (MSDS) contain important safety instructions for handling hazardous substances. Upon request, we can provide you with these data sheets in compiled form on CD-ROM (reference number 646C16).

Occupational safety and environmental protection factors according to the current state of knowledge have been taken into consideration.

The corresponding protective equipment for the products identified with hazardous substance symbols (risk and safety phrases) can be found in the Materials Catalogue (646K1-GB) in the Protective Equipment section.