



Materials for orthodontic products

As of August 2018

Product groups	Product	Identification no.*	
Lingual system	discovery® delight – lingual brackets / molar tubes	1.005	
	discovery® delight lingual tube	1.006, 3.003	
	rematitan® LITE lingual arch	3.200	
	remanium® lingual arch	1.012 or 1.013	
	dentaflex® lingual arch	1.012 or 1.013	
Self-ligating brackets	dinamique® c	5.000 (body), 3.300 (clip), rhodium coating	
	dinamique® m	1.009 (body), 3.300 (clip)	
	discovery® sl / discovery® sl 2.0	1.003, 1.009, 3.001	
Metal brackets	discovery® / discovery® smart	1.005	
	topic	3.003	
	equilibrium® 2 / equilibrium® mini	1.005	
	equilibrium® 2 / equilibrium® mini with hook	1.001, 1.005	
	equilibrium® ti	3.104	
	equilibrium® ti with hook	3.102, 3.104	
Aesthetic brackets	discovery® pearl	5.000	
	Elegance®	1.000, 4.002 glass-fiber reinforced	
	Fascination® / Fascination® 2	5.000	
	Jewels	5.000	
Bracket accessories	Titanium button with chain acc. to Watted	3.100, 3.101	
	Lingual button for bonding technique	1.002	
	Lingual double hook for bonding technique	1.005, 1.008	
	Mesh bases for bonding technique	1.005	
	Mesh bases for buccal tubes for bonding technique	1.000, 1.001	
	Gauze	1.000	
Buccal tubes	Ortho-Cast / Ortho-Cast w.h. / Ortho-Cast w.h. & w.t. / Ortho-Cast M-Series	1.005	
	Ortho-Cast w.h. and central tube	1.000, 1.005	
	Ortho-Cast with large base / Ortho-Cast w.h. and large base	1.000, 1.001, 1.005	
	Ortho-Cast w.h. & w.t. occlusal / gingival	1.005, 1.008	
	Ortho-Cast mini / Ortho-Cast sl	1.005	
	Ortho-Cast NF	3.003	
	Ortho / Ortho w.t.	1.000, 1.002	
	Ortho w.h. / Ortho w.h. & w.t.	1.000, 1.001, 1.002	
	Ortho for bonding technique / Ortho w.t. occlusal for bonding technique	1.000, 1.001, 1.002	
	Ortho with mesial / distal hook and central tube	1.000, 1.002, 1.005	
	rematitan®	3.100, 3.101	
	rematitan® with hook	3.101, 3.102	
	Lingual/palatal sheaths	1.008	
	Lingual/palatal sheaths with mesial/distal hooks	1.000, 1.008	
	Lingual/palatal sheaths with distal hooks	1.002, 1.008	
	Lingual/Palatal sheaths "easy in"	1.008	
	Button	1.002	
	Band seating lug	1.005	
	Double hook / Hook with seating lug	1.008	
	Button hook	1.001	
	Insert-Adapter	1.003	
	Bands	dentaform® Snap	1.008
		dentaform®	1.001
		Standard bicuspid and cuspid bands	1.001
		Standard 1. and 2. molar bands	1.008
		Band material on rolls	1.001
		Matrix band on rolls	1.003
Arches	remanium® ideal arch	1.013	
	Equire preformed ideal arch	1.013	
	dentaflex® ideal arch	1.012 or 1.013	
	Noninium® ideal arch	REF XXX-XXX-00 / 1.006	
		REF XXX-XXX-10 / 1.014	

Product groups	Product	Identification no.*
Arches	Noninium [®] White ideal arch	1.006, 4.008
	Tensic [®] ideal arch	3.200
	Equire thermo-active preformed ideal arch	3.200
	Tensic [®] White ideal arch	3.200, 4.008
	rematitan [®] sl ideal arch	3.200
	rematitan [®] LITE ideal arch / Ricketts [®] PENTA ideal arch	3.200
	rema Spee [®] retraction arch	3.200
	rematitan [®] LITE White ideal arch	3.200, 4.008
	remaloy [®] ideal arch	3.000
	rematitan [®] SPECIAL ideal arch	3.103
	Translucent ideal pearl arches	4.005 + fiber-glass
Wires	remanium [®] straight wire / wire on coils	1.003
	dentaflex [®] straight wire, round, 3-strand twisted	1.003
	dentaflex [®] straight wire, round, 6-strand co-axial	1.012 or 1.013
	Noninium [®] straight wire / wire on coils	REF XXX-XXX-00 / 1.006
		REF XXX-XXX-10 / 1.014
	remaloy [®] straight wire	3.000
	rematitan [®] SPECIAL straight wire	3.103
	dentaflex [®] wire on coils, round, 3-strand twisted / 6-strand co-axial	1.011
rematitan [®] LITE wire on coils	3.200	
Retainer	rematain [®] flat retainer wire	1.013
	Titanium retainer wire, grade 1	3.100
	Titanium retainer wire, grade 5	3.102
	Gold retainer wire	2.301
	remanium [®] lingual retainer	1.011, 1.013
	Titanium lingual retainer	3.101
Wires, arches, retainers Accessories	remanium [®] ligature wire	1.005
	remanium [®] preformed ligatures, short	1.005
	remanium [®] preformed ligatures, long	1.012 or 1.013
	remanium [®] Kobayashi ligatures	1.012 or 1.013
	Ligatures White, Kobayashi White ligatures	1.013, 4.008
	remanium [®] tension springs / compression springs	1.003
	rematitan [®] LITE tension springs / compression springs	3.200
	Cuspid retraction springs	1.000, 1.003
	Jaw fracture splint	1.000
	Sliding/clamping tubes, round with hook	1.000, 1.001
	Sliding/clamping tubes, rectangular with hook	1.005
	Sliding/clamping tubes, rectangular with wire	1.003 + 1.005
	Cross tube, rectangular tube	1.000
	Stop tubes	1.013
	Noninium [®] standard labial arches	1.014
	Noninium [®] Adams clasps / triangular clasps / arrow clasps	1.014
	Noninium [®] ball retainer clasps	REF XXX-XXX-01 / 1.006
		REF XXX-XXX-02 / 1.014
	remanium [®] ball retainer clasps / remanium [®] arrow clasps	1.001
	Guide pins acc. to G. Müller [®]	1.003
	Guide pins acc. to Hinz	1.012 or 1.013
	Lingual bar	1.003
	Strengtheners	1.005
	Stainless steel tubes	1.000
	Plastic sleeving	4.009
	remanium [®] Goshgarian palatal bars	1.013
	remanium [®] Quad Helix	1.013
	Orthorama [®] palatal arches / Lingual arches / Sectional arches / Multi-Action	3.000
	Orthorama [®] transfer jigs	1.000
	Orthorama [®] retention rings	1.001 + 1.008

Product groups	Product	Identification no.*
Wires, arches, retainers	Grid strengtheners stainless steel	1.000
Accessories	Grid strengtheners gold-plated	1.000 gold-plated (24 carat)
Class II appliances	SUS ² telescope rod, assembled	1.002, 1.003
	SUS ² telescope rod	1.003
	SUS ² arch adapter / fixing screw	1.002
	SUS ² telescope element	1.000, 1.003
	SUS ² turbo spring / pressure spring (stainless steel)	1.003
	SUS ² compression spring (Nickel titanium)	3.200
	SUS ² distance spring	1.003
	Spacer rings, crimpable	1.002
	SUS ² ball retainer clasp	1.000
	Herbst hexagon socket screws / Slotted screws	1.002
	Herbst base / pivot	1.002
	Herbst telescopic tubes	1.009
	Herbst telescopic tubes with ball joint	1.000, 1.002, 1.003
	Herbst telescopic rods	1.002
	Herbst spacer rings	1.002
Intraoral / extraoral	Metal clip for safety modules	1.003
	Reverse-pull headgear, Tübinger model	1.000, 1.001, 1.002, 4.100, suede
	Delaire face mask	1.003, 4.100, suede
	Noninium [®] facebow, medium	1.006, 4.001
	Standard facebow, with stop loops	1.000, 1.003, 4.001
	Standard facebow, with stop loops, with canine hook	1.000, 1.001, 1.003, 4.001
	Chin cap, elastic	4.009, polyester, 1.003
	Chin cap, rigid, with short hooks	1.002, 1.003, 4.001, 4.100
	Chin cap, rigid, with long hooks	1.003, 4.100, suede
	Chin cap for Tübinger model	4.100, suede
	Chin cap liner	4.009, polyester
	Chin cap liner, Delaire	Suede
	J-hooks for Hickham headgear	1.011, 1.013
	Dentalastics [®] extra-oral plastic chain	4.009 **
	Elastics, extraoral, latex	4.201 **
	Lip bumper	1.000, 1.001, 3.000, 4.003
	Stop tubes	1.000
	Stop screws	1.002
	Activator tubes	1.000, 1.001
	Elastics, intraoral, latex	4.201 **
	Elastics, intraoral, non-latex	Thermoplastic acrylic**
	Elastic ligature	4.009
	Elasto-Force ligature thread	4.009 **
	Dentalastics [®] rotation wedge / plastic ligatures / separators / Personal ligatures	4.009
	Elasto-Force, plastic chains	4.009
	Oral screen Ulmer Modell	4.009
	Face Former	4.203
	OrthoSafe sports guard	4.101
tomas[®] anchorage system	tomas [®] -pin	3.102
	tomas [®] -abutment universal	1.005
	tomas [®] -abutment tubes	1.000, 1.005
	tomas [®] -abutment wires	1.000, 1.005, 3.000
	tomas [®] -abutment median	1.000, 1.005, 3.000
	tomas [®] -abutment plain	1.000, 1.005
	tomas [®] -abutment EP	1.000
	tomas [®] -transfer cap	4.006
	tomas [®] -laboratory pin EP / tomas [®] -laboratory pin SD	1.002
	tomas [®] -coil spring / tomas [®] -compression spring	3.200

Product groups	Product	Identification no.*
tomas® anchorage system	tomas®-power chain	4.009
	tomas®-uprighting spring	1.000, 1.003, 3.200
	tomas®-stop screw	1.000, 1.002
	tomas®-slotted stops	1.013
	tomas®-hook / tomas®-T-wire	1.003
	tomas®-cross tube	1.000
	tomas®-power arm	1.003, 1.005
	tomas®-crimp hook	1.005
	tomas®-aligner hook	1.005
amda® distalization appliance	amda® telescope	1.000, 1.002, 1.003
	amda® connector	1.003
	amda® palatal arch	1.000
Expansion screws	Standard expansion screws	1.002, 1.003, 4.006
	rematitan® expansion screw Medium	3.101, 3.102, 4.006
	Trapezoidal expansion screw, sectional screw Medium	1.002, 1.003, 4.006
	Sectional screw Mini, retraction screw	1.002, 1.003
	Three dimensional screw acc. to Bertoni / acc. to Steiner	1.002, 1.003
	Fan-type expansion screw	1.000, 1.002
	Mandibular bow screw acc. to Müller	1.002, 1.003, 4.006
	Guide ridge for flexible forward thrust double plate system acc. to Schaneng	1.002, 1.015
	Expansion screw for split activator	1.002, 1.003
	Expansion screw for progenia activator acc. to Weise	1.002
	Piston spring screw	1.002, 1.003
	Serrated housing nut	1.002
	Variety click / Variety click SP expansion screw	1.000, 1.002, 1.003
	Variety expansion screw / Variety SP expansion screw	1.000, 1.002, 1.003
	Titan hyrax® Maxi expansion screw	3.102, 3.104
	rematitan® straight wire, round	3.100
	hyrax® / hyrax® click expansion screw	1.000, 1.002, 1.003
	Arrows to indicate the opening direction	4.006
	Expansion screw key, small	1.003
	Expansion screw key, large	1.002 + 1.003
	Safety key	1.003, 4.100

* **Note:** If several materials are listed, this means that the product consists of all these materials.

** Also contains traces of other elements. Please ask if you have any queries.

1. Stainless steel

Composition in weight %

Identification No.	Material		C	Si	Mn	Cr	Mo	Ni	P	S	Other	Fe
	Designation	Number (DIN, AISI)*										
1.000	Stainless steel	1.4301	≤ 0.07	≤ 1.0	≤ 2.0	17.0–19.5	–	8.0–10.5	≤ 0.045	≤ 0.03	N ≤ 0.11	Residue
1.001	Stainless steel	1.4303	≤ 0.06	≤ 1.0	≤ 2.0	17.0–19.0	–	11.0–13.0	≤ 0.045	≤ 0.03	N ≤ 0.11	Residue
1.002	Stainless steel	1.4305	≤ 0.10	≤ 1.0	≤ 2.0	17.0–19.0	–	8.0–10.0	≤ 0.045	0.15–0.35	N ≤ 0.11/ Cu ≤ 1,0	Residue
1.003	Stainless steel (remanium®)	1.4310	0.05–0.15	≤ 2.0	≤ 2.0	16.0–19.0	≤ 0.8	6.0–9.5	≤ 0.045	≤ 0.015	N ≤ 0.11	Residue
1.004	Stainless steel	1.4401	≤ 0.07	≤ 1.0	≤ 2.0	16.5–18.5	2.0–2.5	10.0–13.0	≤ 0.045	≤ 0.03	N ≤ 0.11	Residue
1.005	Stainless steel	1.4404	≤ 0.03	≤ 1.0	≤ 2.0	16.5–18.5	2.0–2.5	10.0–13.0	≤ 0.045	≤ 0.03	N ≤ 0.11	Residue
1.006	Stainless steel (Noninium®)	1.4456	≤ 0.1	≤ 1.0	16.0–20.0	16.0–20.0	1.8–2.5	≤ 0.2	≤ 0.05	≤ 0.05	V ≤ 0.2 N 0.7–1.0	Residue
1.007	Stainless steel	1.4460	≤ 0.05	≤ 1.0	≤ 2.0	25.0–28.0	1.3–2.0	4.5–6.5	≤ 0.035	≤ 0.3	N 0.05–0.20	Residue
1.008	Stainless steel	1.4541	≤ 0.08	≤ 1.0	≤ 2.0	17.0–19.0	–	9.0–12.0	≤ 0.045	≤ 0.3	Ti 5 x C bis 0.7	Residue
1.009	Stainless steel	1.4542	≤ 0.07	≤ 0.7	≤ 1.5	15.0–17.0	≤ 0.6	3.0–5.0	≤ 0.040	≤ 0.03	Cu 3.0–5.0 Nb 5 x C bis 0.45	Residue
1.010	Stainless steel	1.4435	≤ 0.03	≤ 1.0	≤ 2.0	17.0–19.0	2.5–3.0	12.5–15.0	≤ 0.045	≤ 0.025	N ≤ 0.11	Residue
1.011	Stainless steel	AISI 302	≤ 0.15	≤ 1.0	≤ 2.0	17.0–19.0	–	8.0–10.0	≤ 0.045	≤ 0.03	–	Residue
1.012	Stainless steel (dentaflex®)	AISI 302 B	≤ 0.15	2.0–3.0	≤ 2.0	17.0–19.0	–	8.0–10.0	≤ 0.045	≤ 0.03	–	Residue
1.013	Stainless steel (remanium®)	AISI 304	≤ 0.08	≤ 1.0	≤ 2.0	18.0–20.0	–	8.0–10.5	≤ 0.045	≤ 0.03	–	Residue
1.014	Stainless steel (Noninium®)	1.3808	0.15–0.25	0.2–0.6	9.5–12.5	16.5–18.0	2.7–3.7	0.05	0.02	0.01	Cu 0.25 N 0.45–0.55	Residue
1.015	Stainless steel	1.4568	≤ 0.03	≤ 0.7 0	≤ 1.0	16.0–18.0	–	6.5–7.8	≤ 0.04	≤ 0.01 5	Al 0.70–1.50	Residue

*Note: Stainless steel with foreign standards which correspond to the DIN material numbers are also acceptable.

2. Copper and precious metal alloys

Composition in weight %

Identification No.	Material		Ag	Cu	Ni	Pb	Zn	Fe	Mn	Sn	Sb	Al	Others
	Designation	Number (DIN)*											
2.000	Argentan	2.0770	–	45–48	9–11	0.5–2.0	38–45	≤ 0.05	≤ 0.5	≤ 0.3	–	–	≤ 0.1
2.001	Argentan	2.0780	–	56–58	11–13	0.3–1.5	26–33	≤ 0.05	≤ 0.5	≤ 0.3	–	–	≤ 0.1
2.002	Argentan	2.0790	–	59–63	17–19	0.3–1.5	Residue	≤ 0.03	≤ 0.7	–	–	–	≤ 0.4
2.100	Brass	2.0321	–	62.0–65.5	≤ 0.3	≤ 0.1	Residue	≤ 0.01	≤ 0.1	≤ 0.1	≤ 0.1	–	–
2.101	Brass	2.0360	–	59.0–62.0	≤ 0.3	≤ 0.1	Residue	≤ 0.01	≤ 0.1	≤ 0.1	≤ 0.1	–	–
2.200	Silver filler	2.5153 L-Ag75	74–76	Residue	–	≤ 0.02	2.0–4.0	–	–	–	–	≤ 0.005	≤ 0.1
2.201	Silver filler	2.5147 L-Ag44	43–45	29–31	–	≤ 0.02	Residue	–	–	–	–	≤ 0.005	≤ 0.1
2.202	Silver filler	2.5159 L-Ag55Sn	54–57	21–23	–	≤ 0.02	Residue	–	–	2.0–5.0	–	≤ 0.005	≤ 0.1
2.203	Silver filler	2.5151 L-Ag72	71–73	Residue	–	≤ 0.02	–	–	–	–	–	≤ 0.005	≤ 0.1
2.204	Silver filler	–	43–46	18–22	–	–	6–10	–	–	2.0–6.0	–	–	≤ 0.3
2.205	Silver filler	–	57–61	15–18	–	–	Residue	–	–	–	–	–	≤ 0.3
2.300	Gold filler	–	38.5–39.5	Residue	–	–	–	–	–	–	–	–	Au 33.0
2.301	Au-Pt alloy	–	16–17	8–10	–	–	–	–	–	–	–	–	Au 60–62 Pt 13–14

3. Non-precious metal alloys

Composition in weight %

Identification No.	Material		Ni	Fe	Mn	Cr	Mo	W	Ti	Si	C	Co	Al	S	O	H	N	Others
	Designation	Number (DIN)*																
3.000	CoCr alloy (remaloy®)	—	19–23	4–6	≤ 1.0	18–22	3–5	3–5	0.1–2.0	≤ 0.5	≤ 0.03	Residue	—	≤ 0.1	—	—	—	—
3.001	CoCr alloys (Elgiloy®)	—	14–16	Residue	1.0–3.0	19–21	6–8	—	—	—	≤ 0.3	38–42	—	—	—	—	—	Be 0.01–0.09
3.002	CoCr alloy	—	—	27–31	≤ 1.0	28–32	4–6	—	—	≤ 0.1	≤ 0.35	31–35	—	—	—	—	—	—
3.003	CoCr alloy (topic, Ortho-Cast NF)	—	≤ 0.1	—	≤ 0.3	28–32	4–6	—	—	≤ 1.0	≤ 1.0	Residue	—	—	—	—	≤ 0.3	—
3.100	Titanium	3.7025	—	≤ 0.15	—	—	—	—	Residue	—	≤ 0.06	—	—	—	≤ 0.12	≤ 0.013	≤ 0.05	—
3.101	Titanium	3.7065	—	≤ 0.3	—	—	—	—	Residue	—	≤ 0.06	—	—	—	≤ 0.35	≤ 0.013	≤ 0.05	—
3.102	TiAl6V4	3.7165	—	≤ 0.3	—	—	—	—	Residue	—	≤ 0.08	—	5.5–6.75	—	≤ 0.2	≤ 0.025	≤ 0.05	V 3.5–4.5
3.103	TiMo alloy (rematitan® Special)	—	—	—	—	—	11.5	—	78	—	—	—	—	—	—	—	—	Zr ≤ 6 Sn ≤ 4.5
3.104	Titanium (equilibrium® ti)	3.7035	—	≤ 0.2	—	—	—	—	Residue	—	≤ 0.06	—	—	—	≤ 0.18	≤ 0.013	≤ 0.05	—
3.200	NiTi alloy (rematitan® LITE) (Tensic®) (Equire)	—	50–60	≤ 0.5	—	—	—	—	Residue	—	≤ 0.1	—	≤ 0.1	—	≤ 0.1	≤ 0.01	≤ 0.01	—
3.201	NiTiCu alloy	—	50–60	≤ 0.5	—	—	—	—	Residue	—	≤ 0.1	—	≤ 0.1	—	≤ 0.1	≤ 0.017	≤ 0.01	Cu < 1.0
3.300	NiCoCrMo alloy	MP35N®	33–37	≤ 1	≤ 0.15	19–21	9–10.5	—	≤ 1	≤ 0.15	≤ 0.025	Residue	—	≤ 0.01	—	—	—	P ≤ 0.015 B ≤ 0.015

4. Plastics

5. Ceramic materials

Composition in weight %

Identification No.	Material	
	Designation	Symbol (DIN)*
4.000	Epoxy	EP
4.001	Polyamide	PA
4.002	Polycarbonate	PC
4.003	High-density polyethylene	PE-HD
4.004	Low-density polyethylene	PE-LD
4.005	Polymethylmethacrylate	PMMA
4.006	Polypropylene	PP
4.007	Polystyrene	PS
4.008	Polytetrafluorethylene	PTFE
4.009	Polyurethane	PUR
4.010	Polyvinylchloride	PVC
4.011	Polyvinylsiloxane	
4.100	Acrylonitrile butadiene styrene	ABS
4.101	Ethylene / vinyl acetate	EVA
4.200	Synthetic isoprene rubber	IR
4.201	Natural rubber	NR
4.202	Silicone rubber	Q
4.203	Silicone	SI

Identification No.	Material		Al ₂ O ₃	ZnO	MgO	Other
	Designation	Number (DIN)*				
5.000	Aluminum oxide	—	99.99	—	—	≤ 0.01
5.001	Band cement	—	—	80–86	6–10	≤ 10

Alloy elements

Ag	silver	O	oxygen
Al	aluminum	P	phosphorus
Au	gold	Pb	lead
Be	beryllium	Pt	platinum
C	carbon	Rh	rhodium
Cr	chromium	S	sulphur
Cu	copper	Sb	antimony
Co	cobalt	Si	silicon
Fe	iron	Sn	tin
H	hydrogen	Ti	titanium
Mn	manganese	V	vanadium
Mo	molybdenum	W	tungsten
N	nitrogen	Zn	zinc
Nb	niobium	Zr	zirconia
Ni	nickel		

Note: The materials listed in tables 1–4 enable easy identification of chemical compositions. Not all the listed materials are used by Dentaurum. You can find the most recent materials list at www.dentaurum.com.

Date of information: August 2018