



ecoNEM dental alloys

With its non-precious dental alloys, Heimerle + Meule accommodates the demand for low-cost alloys. Naturally the same high standards were used in the development of these alloys as for the development of the precious dental alloys.

Therefore, critical alloy elements such as nickel and beryllium were deliberately omitted. All ecoNEM alloys feature excellent corrosion resistance, are extremely well tolerated by the body and cause no skin irritation or allergic sensitization.

ecoNEM cast and ecoNEM cast V, the spring-tempered model casting alloy on cobalt basis

Ideal for the production of attachment and telescopic work, as well as tertiary structures in implant technology. The good physical and technical properties of ecoNEM cast alloys enable delicate model cast constructions.

ecoNEM classic, inexpensive cobalt/chrome ceramic bonding alloy

The affordable, nickel and beryllium-free ceramic bonding alloy with a median CTE value of 14.5 $\mu\text{m/mK}$ (25 - 500 °C) for firing of classic ceramics without oxidation firing, e.g. INSPIRATION.

ecoNEM nova, cobalt/chrome ceramic bonding alloy with molybdenum

Thanks to the element molybdenum, which is indispensable for corrosion durability, ecoNEM nova is a user-friendly alloy, which can be machined and polished particularly easily. Due to the low CTE value of 14.0 $\mu\text{m/mK}$ (25 - 500 °C), ecoNEM nova can be veneered very well with classic ceramics. It has a very high firing stability. When using INSPIRATION, no oxidation and no long-term cooling is required.

ecoNEM star, our new cobalt/chrome ceramic bonding alloy

The star among nickel and beryllium-free ceramic bonding alloys. Just like ecoNEM nova, this precious metal-free alloy is characterized by user-friendly handling and biocompatibility. A favourably priced alternative that bonds very well with ceramic materials.



ecoNEM cast model casting alloy on cobalt basis	7390 3 001	149.00 €/1000 g *
Small amount in tin box, 70 g	7390 3 101	10.00 €
ecoNEM cast V model casting alloy on cobalt basis	7394 3 001	149.00 €/1000 g *
Small amount in tin box, 70 g	7394 3 101	10.00 €
ecoNEM classic cobalt/chrome ceramic bonding alloy	7391 3 001	279.00 €/1000 g *
Small amount in tin box, 70 g	7391 3 101	20.00 €
ecoNEM nova cobalt/chrome ceramic bonding alloy	7392 3 001	390.00 €/1000 g *
Small amount in tin box, 50 g	7392 3 101	20.00 €
ecoNEM star cobalt/chrome ceramic bonding alloy	7397 3 001	299.00 €/1000 g *
Small amount in tin box, 50 g	7397 3 101	20.00 €

* Packaging units in plastic tins are 250 g, 500 g, 1000 g.

NEM universal solder	7773 3 300	17.30 €/5 g
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Non-precious alloys																	
Alloys	Material contents in %													Vickers hardness HV 10/30	Mean linear CTE $\mu\text{m/mK}$ 20-600 °C	Melting range °C	Casting temp. °C
	Co	Cr	W	Mn	Nb	V	Mo	Si	C	Fe	Ni	N					
Spring-tempered model casting alloy on cobalt basis																	
ecoNEM cast	62,5	28,8	0,65	0,65	–	–	6,1	0,4	0,18	0,4	–	–	330	–	1370-1405	1505	
ecoNEM cast V	63	28	0,7	0,65	–	–	5,9	0,5	0,55	0,6	–	–	420	–	1355-1390	1490	
Cobalt/chrome ceramic bonding alloy																	
ecoNEM classic	61,3	28,1	8,3	0,19	–	–	–	1,65	–	0,3	–	–	285	14,5	1410-1418	1518	
ecoNEM nova	60,05	25	9,4	–	2,1	1	1,2	0,95	–	< 0,1	–	–	370	14,0	1360-1374	1474	
ecoNEM star	59,5	25	9,5	*	–	–	3,5	1,0	*	*	–	*	280 – 295	14,0	1305-1400	1550	
NEM universal solder																	
NEM Universal-Lot	62	29	–	< 1	–	–	4	< 1	< 1	–	–	–	Melting range °C		Working temp. °C		
														1140-1270	1320		

The elements marked with * result in a material content of a total maximum of 1,5%.