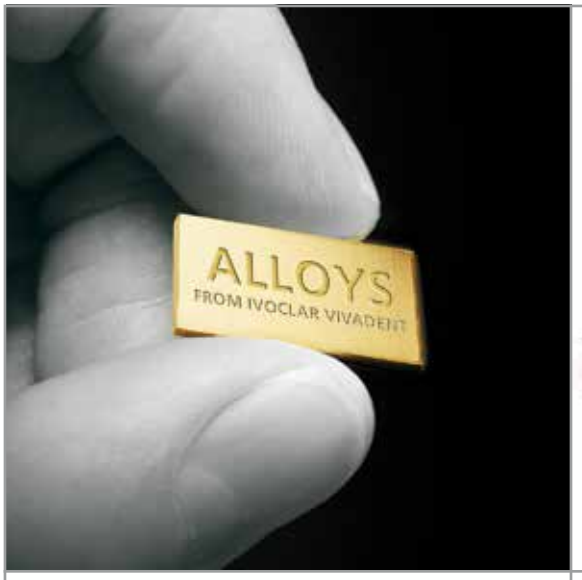


PRODUCT CATALOG

DENTAL ALLOYS
CONSUMABLES

2013

ivoclar vivadent®
passion vision innovation

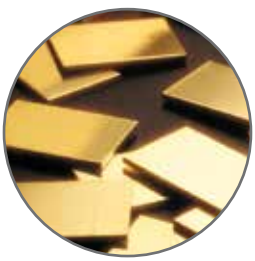
Dental ALLOYS

		Item 25 g Packages
	High gold content	
High gold content	Academy Gold™	576588
High gold content	Harmony® Medium	576592
High gold content	Harmony® KF	576593
High gold content	Harmony® Hard	582074
High gold content	Harmony® PF	576600
	Reduced gold content	
Reduced gold content	Academy Gold™ XH	576621
Reduced gold content	Harmony® X-Hard	576599
Reduced gold content	XL-X®	582199
Reduced gold content	X-L®	582193
Reduced gold content	Maxigold®	576629
Reduced gold content	Maxigold® KF	576631
Reduced gold content	Harmony® C&B 55	582217
Reduced gold content	Midigold® 50	583046
Reduced gold content	Magenta®	582080
Reduced gold content	Minigold®	576628
Containing Pd-silver	Solarcast® 20*	582205
Containing Pd-silver	Harmony® 3	608224
Containing Pd-silver	WLW®*	582880
Containing Pd-silver	Elektra®	582886
Universal	BioUniversal® PKF	577350
Universal	BioUniversal® PdF	576622
Universal	BioUniversal®	576589
Universal	BioUniversal® E	592531
Implant	Callisto® Implant 78	601948
Implant	Callisto® Implant 33	638937
Implant	IS® 64*	576634
Implant	Callisto® Implant 60	601960
High Gold content	Brite Gold™	576590
High Gold content	Brite Gold™ XH	591347
High Gold content	Golden Ceramic®	582898
High Gold content	Callisto® 86	639451
High Gold content	Aquarius Hard	576617
High Gold content	Aquarius	576619
High Gold content	d.SIGN® 98	576611
High Gold content	Callisto® 84	639436
High Gold content	Y	582916
High Gold content	Aquarius XH	576615
High Gold content	Y-2	582922
High Gold content	Y-Lite	582928
High Gold content	Sagittarius	576626
High Gold content	Y-1	582934
High Gold content	d.SIGN® 96	576609
Reduced Gold content	d.SIGN® 91	576608
Reduced Gold content	W	576635
Reduced Gold content	W-5	582947
Reduced Gold content	Lodestar®	576633
Reduced Gold content	W-3*	582940
Reduced Gold content	Leo	582965
Reduced Gold content	W-2*	582953
Reduced Gold content	Evolution® Lite	583653
	Reduced gold content	
Containing palladium	Spartan® Plus*	582977
Containing palladium	Spartan®*	582971
Containing palladium	Capricorn	576613
Containing palladium	d.SIGN® 84	576597
Containing palladium	Protocol®*	582989
Containing palladium	Callisto® 75 Pd	632926
Containing palladium	Aries	576614
Containing palladium	d.SIGN® 67	576596
Containing palladium	d.SIGN® 59	576695
Containing palladium	d.SIGN® 53	576594
Containing palladium	W-1*	582983
Containing palladium	Capricorn 15	577349
Containing palladium	Callisto® CP+*	613970

Consumables

• PHONE: 001 716 691 2921 • FAX: 001 716 691 2285 • E-MAIL: alloys.int@ivoclarvivadent.us.com

DENTAL ALLOYS



For over 100 years, Ivoclar Vivadent, Inc. formerly Williams Dental, has provided dentistry with high quality precious metal alloys.

The dedicated materials science research team at Ivoclar Vivadent, Inc. has been responsible for a number of innovations over the years, and has made a significant contribution to dentistry.

Historically speaking, Ivoclar Vivadent, Inc. was instrumental in the early research of direct filling gold materials, and again later on, with the development of palladium based alloys for use with ceramics. Contributions to the casting gold alloys include the Harmony Line of alloys which are the oldest line of alloys in continuous use for dentistry.

To this day, the innovation continues with our newest alloys to meet the requirements of the market needs.

Implant-supported restorations are state-of-the-art. Alloys continue to be the first choice for long-span as well as single-tooth restorations. Based on more than 15 years of experience with IS alloys, we have selected the respective alloys from our range which feature the required physical properties for the indication "Implant Superstructures". Further prerequisites are a good corrosion resistance as well as high tissue compatibility. Apart from easy processing, such as casting, grinding and polishing, the capability of being cast on is of particular importance. The alloys listed below comply with all these requirements.

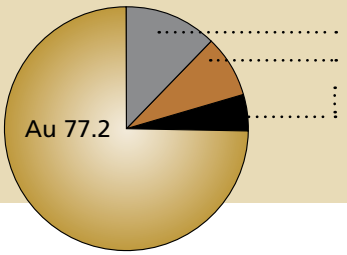
Crown and Bridge alloys	Au	Pt	Pd	Ag	0.2 % proof strength	E-modulus	Cast-on capability
High Gold content							
Harmony® KF	75.1	3.2	6.8	10.2	530	84.000	✓
Harmony® PF	72.0	3.6	–	13.7	525	89.000	✓
Academy Gold™ XH	70.7	3.6	–	13.7	505	86.000	✓
Reduced Gold content:							
Harmony® X-Hard	68.3	2.9	3.6	10.0	735	93.000	✓
XL-X®	62.8	–	3.9	16.1	690	105.000	✓
Maxigold®KF	56.6	–	8.4	29.0	480	81.000	✓
Midigold®50	50.0	–	3.5	35.0	470	74.000	✓
Magenta®	50.0	–	6.5	21.0	820	86.000	✓
Universal alloys							
BioUniversal®	59.4	2.0	9.5	25.5	480	103.000	✓
BioUniversal® KF	74.3	<1.0	6.0	14.0	630	105.000	✓
Implant alloys							
Callisto® Implant 78	78.6	9.7	7.9	–	600	110.000	✓
Callisto® Implant 33	33.0	–	52.8	7.2	500	120.000	✓
IS® 64	2.8	1.0	59.9	26.0	560	124.000	✓
Callisto® Implant 60	2.0	<1.0	60.0	25.2	610	130.000	✓
Ceramic alloys							
High Gold content:							
d.SIGN® 98	85.9	12.1	–	–	510	80.000	✓
Aquarius XH	82.8	9.0	5.0	–	510	83.000	✓
Y-Lite	75.0	–	18.8	2.0	500	88.000	✓
Sagittarius	75.0	2.0	16.8	2.0	580	94.000	✓
Reduced Gold content:							
d.SIGN® 91	60.0	–	30.6	–	500	108.000	✓
W-5	52.2	<1.0	26.0	17.1	505	118.000	✓
Lodestar®	51.5	–	38.5	–	495	98.000	✓
W-3	48.7	–	39.6	–	495	128.000	✓
W-2	44.8	–	40.5	5.9	540	113.000	✓
Evolution® Lite	40.3	–	39.3	9.2	565	130.000	✓
Containing Palladium							
Capricorn 15	15.0	–	51.9	23.0	490	101.000	✓
d.SIGN® 84	9.0	–	75.2	3.0	495	117.000	✓
d.SIGN® 67	4.0	–	62.7	20.0	545	104.000	✓
Spartan Plus	2.0	–	78.8	–	795	97.000	✓
Spartan®	2.0	–	78.7	–	945	94.000	✓
Capricorn	6.0	–	78.1	3.0	525	97.000	✓
Protocol®	6.0	–	75.2	6.5	500	103.000	✓
Callisto® 75 Pd	2.5	–	75.2	7.1	500	117.500	✓
d.SIGN® 59	–	<1.0	59.2	27.9	490	139.000	✓
d.SIGN® 53	–	<1.0	53.8	34.9	545	132.000	✓
W-1	–	–	53.3	37.7	485	114.000	✓
Callisto® CP+	–	–	25.0	–	780	180.000	✓
Predominantly base alloys							
d.SIGN® 30	60.2	30.1	<1.0	–	520	234.000	–
Colado® CC	59.0	25.5	5.5	5.0	500	198.000	–

High gold content

ACADEMY GOLD™

High gold crown and bridge alloy demonstrating high elongation, for the fabrication of inlays, onlays and small bridges.

Composition in %



Advantages
- Pd-free
- Aesthetic golden yellow color
- Extended range of indications
- Optimal marginal adaptation even after hardening
- Excellent casting and processing properties
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, short span bridges

Technical data

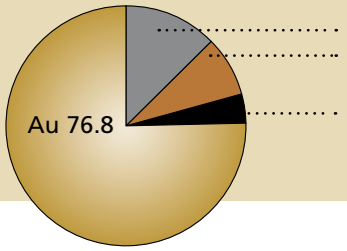
Type	2
Color	Rich yellow
Density (g/cm³)	15.9
Melting range (°C)	940 - 980
Elongation (%)	55.0
Vickers hardness	125
0.2 % proof stress (MPa)	240

25 g 576588

HARMONY® MEDIUM

Clinically proven high gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Ideal golden yellow color
- High elongation (good marginal adaptation)
- Clinically proven
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, short span bridges

Technical data

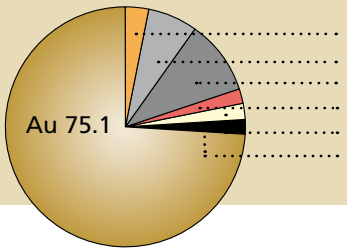
Type	2
Color	Rich yellow
Density (g/cm³)	15.2
Melting range (°C)	880 - 945
Elongation (%)	40.0
Vickers hardness	120
0.2 % proof stress (MPa)	235

25 g 576592

HARMONY® KF

Clinically proven high gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Cu-free
- Deep yellow color
- Clinically proven
- Prevention of discolouration in telescope and conus crowns and bars
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

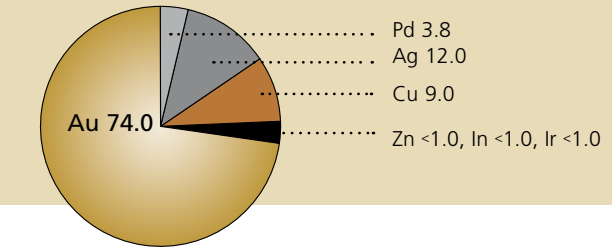
Type	4
Color	Yellow
Density (g/cm³)	16.1
Melting range (°C)	970 - 1080
Elongation (%)	5.0
Vickers hardness	225
0.2 % proof stress (MPa)	530

25 g 576593

HARMONY® HARD

Clinically proven high gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Deep yellow color
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, short span bridges

Technical data

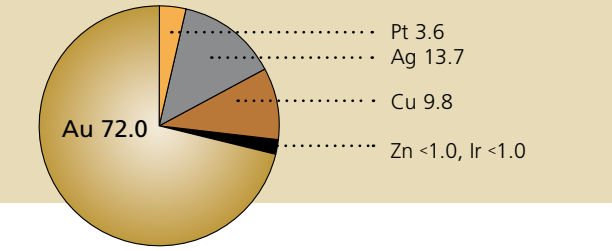
Type	2
Color	Yellow
Density (g/cm³)	14.9
Melting range (°C)	895 - 970
Elongation (%)	40.0
Vickers hardness	130
0.2 % proof stress (MPa)	260

25 g 582074

HARMONY® PF

Clinically proven high gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Pd-free
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

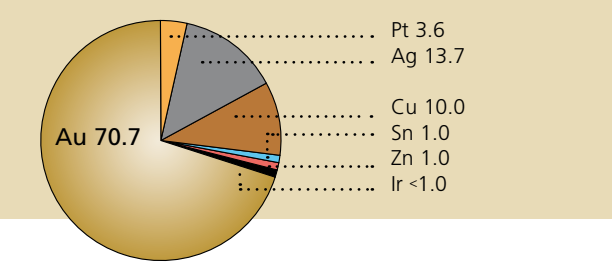
Type	4
Color	Yellow
Density (g/cm³)	15.6
Melting range (°C)	900 - 940
Elongation (%)	18.0
Vickers hardness	245
0.2 % proof stress (MPa)	525

25 g 576600

ACADEMY GOLD™ XH

Clinically proven high gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Alloy specially designed for the SR Link bonding system
- Pd-free
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

Type	4
Color	Yellow
Density (g/cm³)	15.6
Melting range (°C)	860 - 925
Elongation (%)	5.0
Vickers hardness	220
0.2 % proof stress (MPa)	505

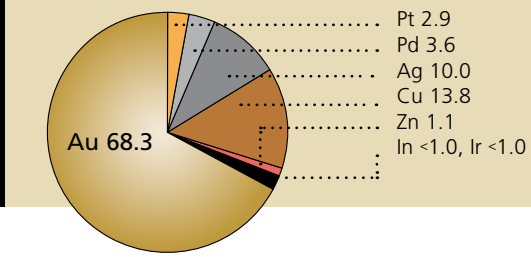
25 g 576621

Reduced gold content

HARMONY® X-HARD

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Deep yellow color
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

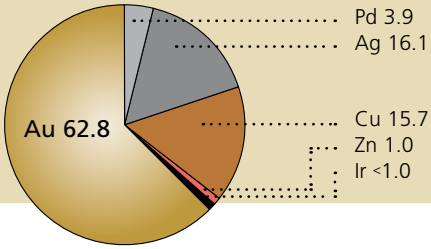
Type	4
Color	Yellow
Density (g/cm³)	15.9
Melting range (°C)	900 - 960
Elongation (%)	14.0
Vickers hardness (HV5)	255
0.2 % proof stress (MPa)	735

25 g 576599

XL-X®

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Deep yellow color
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

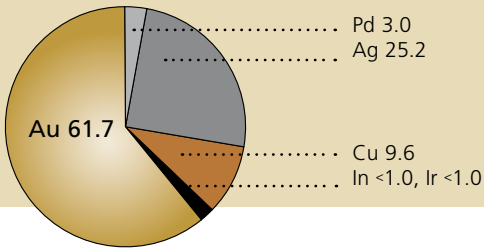
Type	4
Color	Yellow
Density (g/cm³)	13.9
Melting range (°C)	870 - 910
Elongation (%)	13.0
Vickers hardness	270
0.2 % proof stress (MPa)	690

25 g 582199

X-L®

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Deep yellow color
- Clinically proven
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

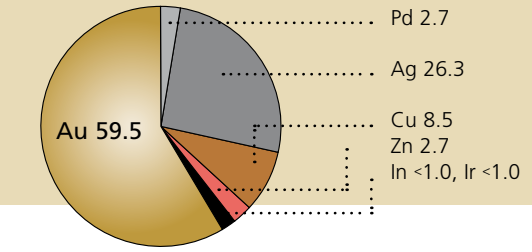
Type	4
Color	Yellow
Density (g/cm³)	14.0
Melting range (°C)	890 - 950
Elongation (%)	26.0
Vickers hardness	140
0.2 % proof stress (MPa)	415

25 g 582193

MAXIGOLD®

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Deep yellow color
- Clinically proven
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

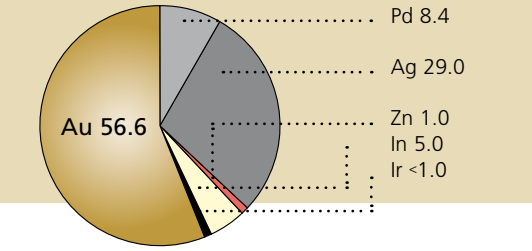
Type	3
Color	Yellow
Density (g/cm³)	13.9
Melting range (°C)	840 - 890
Elongation (%)	25.0
Vickers hardness	150
0.2 % proof stress (MPa)	310

25 g 576629

MAXIGOLD® KF

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Cu-free
- Clinically proven
- Prevention of discoloration in telescope and conus crowns and bars
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

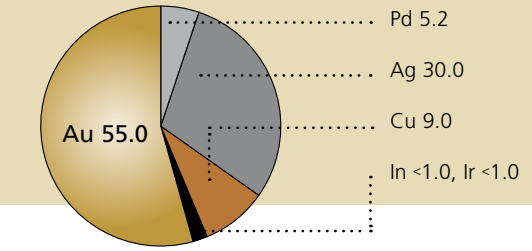
Type	4
Color	Yellow
Density (g/cm³)	13.9
Melting range (°C)	955 - 1035
Elongation (%)	5.0
Vickers hardness	235
0.2 % proof stress (MPa)	480

25 g 576631

HARMONY® C&B 55

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Deep yellow color
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

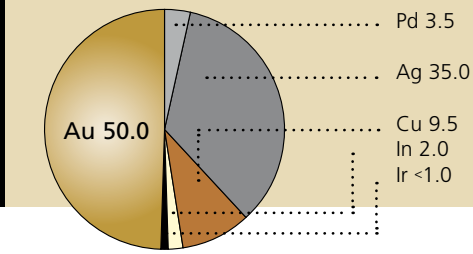
Type	4
Color	Yellow
Density (g/cm³)	13.6
Melting range (°C)	905 - 975
Elongation (%)	19.0
Vickers hardness	185
0.2 % proof stress (MPa)	425

25 g 582217

MIDIGOLD® 50

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Deep yellow color
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

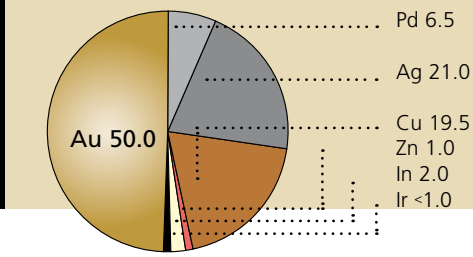
Type	4
Color	Yellow
Density (g/cm³)	13.2
Melting range (°C)	825 - 915
Elongation (%)	6.0
Vickers hardness	180
0.2 % proof stress (MPa)	470

25 g 583046

MAGENTA®

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

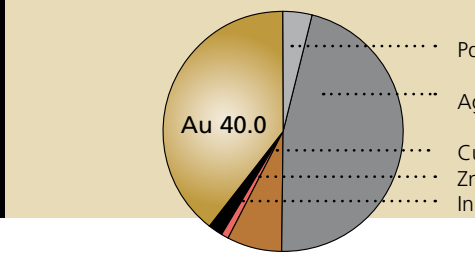
Type	4
Color	Yellow
Density (g/cm³)	13.0
Melting range (°C)	815 - 875
Elongation (%)	7.0
Vickers hardness	285
0.2 % proof stress (MPa)	820

25 g 582080

MINIGOLD®

Clinically proven reduced-gold crown and bridge alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	Yellow
Density (g/cm³)	12.4
Melting range (°C)	865 - 945
Elongation (%)	28.0
Vickers hardness	125
0.2 % proof stress (MPa)	410

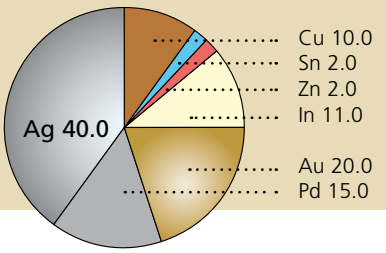
25 g 576628

SOLARCAST® 20

Pd based

Clinically proven palladium-based alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

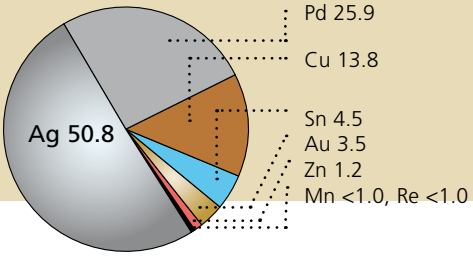
Type	3
Color	Yellow
Density (g/cm³)	10.8
Melting range (°C)	815 - 875
Elongation (%)	8.0
Vickers hardness	195
0.2 % proof stress (MPa)	–

25 g 582205

HARMONY® 3

Clinically proven palladium-based alloy demonstrating outstanding properties.

Composition in %



Advantages
- Economical due to low density
- High stability
- Excellent handling characteristics
- Excellent polishing properties
- Suitable for bonding system and veneering composites

Indication
Inlays, onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

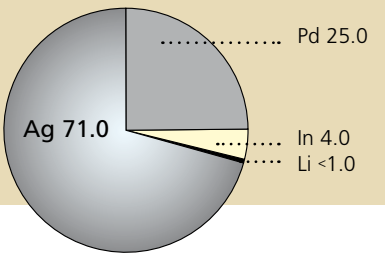
Type	4
Color	White
Density (g/cm³)	10.6
Melting range (°C)	880 - 960
Elongation (%)	14.0
Vickers hardness	230
0.2 % proof stress (MPa)	465

25 g 608224

WLW®

Clinically proven palladium-based alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

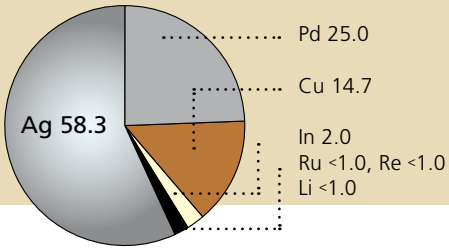
Type	3
Color	White
Density (g/cm³)	10.5
Melting range (°C)	1045 - 1130
Elongation (%)	5.0
Vickers hardness	150
0.2 % proof stress (MPa)	320

25 g 582880

ELEKTRA®

Clinically proven palladium-based alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	White
Density (g/cm³)	10.4
Melting range (°C)	865 - 990
Elongation (%)	8.0
Vickers hardness	185
0.2 % proof stress (MPa)	465

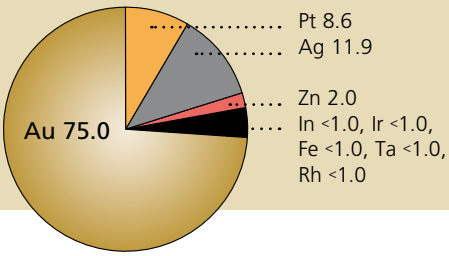
25 g 582886

Universal alloys

BIOUNIVERSAL® PKF

High gold universal alloy for veneers made of special ceramics and composite materials.

Composition in %



- Pd-/Cu-free
- Yellow color
- Compatible with low fusing ceramics and composite veneering materials
- Wide range of indications
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

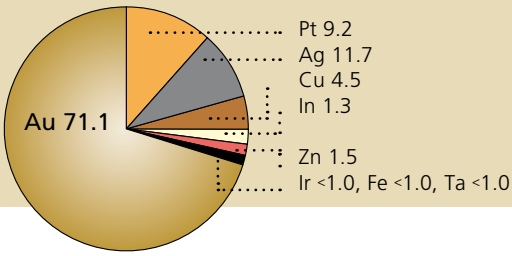
Type	4
Color	Yellow
Density (g/cm³)	16.8
Melting range (°C)	945 - 1035
CTE 25 °C - 500 °C	15.9
CTE 20 °C - 600 °C	16.1
Elongation (%)	8.0
Vickers hardness	200
0.2 % proof stress (MPa)	365

25 g 577350

BIOUNIVERSAL® PdF

High gold universal alloy for veneers made of special ceramics and composite materials.

Composition in %



Advantages
- Pd-free
- Yellow color
- Compatible with special ceramics and composite veneering materials
- Certified biocompatibility
- Wide range of indications

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

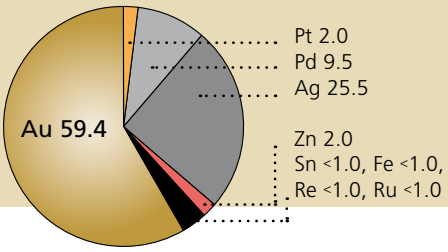
Type	4
Color	Yellow
Density (g/cm³)	16.2
Melting range (°C)	910 - 970
CTE 25 °C - 500 °C	15.8
CTE 20 °C - 600 °C	15.8
Elongation (%)	9.0
Vickers hardness	225
0.2 % proof stress (MPa)	450

25 g 576622

BIOUNIVERSAL®

Reduced gold universal alloy for veneers made of special ceramics and composite materials.

Composition in %



Advantages
- Cu-free
- Yellow color
- Compatible with low fusing ceramics and composite veneering materials
- High temperature stability
- Excellent milling properties

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

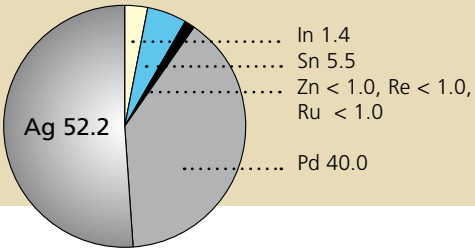
Type	4
Color	Yellow
Density (g/cm³)	14.5
Melting range (°C)	1020 - 1100
CTE 25 °C - 500 °C	16.1
CTE 20 °C - 600 °C	16.3
Elongation (%)	6.0
Vickers hardness	225
0.2 % proof stress (MPa)	480

25 g 576589

BIOUNIVERSAL® E

Silver-Palladium universal alloy for use with special ceramic and comopsite materials.

Composition in %



Advantages
- Economical, low density
- Easy processing and polishing
- Excellent melting and flow properties
- Compatible with special ceramic and composite materials
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	White
Density (g/cm³)	10.7
Melting range (°C)	1100 - 1150
CTE 25 °C - 500 °C	16.1
CTE 20 °C - 600 °C	16.4
Elongation (%)	10.0
Vickers hardness	190
0.2 % proof stress (MPa)	355

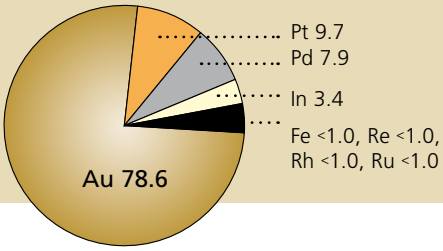
25 g 592531

Implant series

CALLISTO® IMPLANT 78

High gold ceramic alloy especially for implant superstructures

Composition in %



Advantages
- Ag and Cu-free
- 96% precious metal content
- Very high strength
- Excellent casting and flow properties
- Even grain size distribution (16–25 micron)

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope/conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

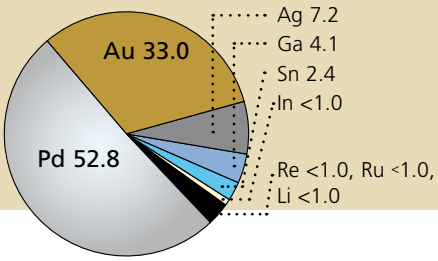
Type	4
Color	White
Density (g/cm³)	17.6
Melting range (°C)	1135 - 1250
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.0
Elongation (%)	5.0
Vickers hardness	240
0.2 % proof stress (MPa)	600

25 g 601948

CALLISTO® IMPLANT 33

Reduced gold ceramic alloy, especially for implant superstructures

Composition in %



Advantages
- Inexpensive alloy with a low density for increased economic efficency
- Wide indication range
- Excellent physical properties: particularly high strength values
- Convenient handling and polishing properties

Indication
Inlays, onlays, 3/4 crowns, crowns, ceramic crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

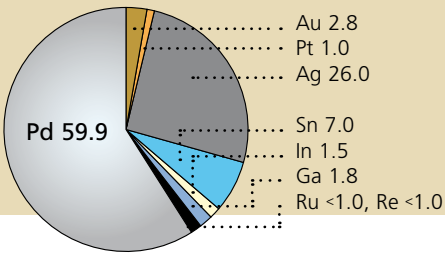
Type	4
Color	White
Density (g/cm³)	12.6
Melting range (°C)	1115 – 1305
CTE 25 °C - 500 °C	14.0
CTE 20 °C - 600 °C	14.3
Elongation (%)	35.0
Vickers hardness	235
0.2 % proof stress (MPa)	500

25 g 638937

IS®. 64

Palladium-silver ceramic alloy demonstrating physical properties that specifically match those of the superstructures used in implantology as well as improved corrosion resistance.

Composition in %



Advantages
- Specially developed for implant superstructures
- Clinically proven
- High modulus of elasticity, high strength
- Easy to process and polish
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

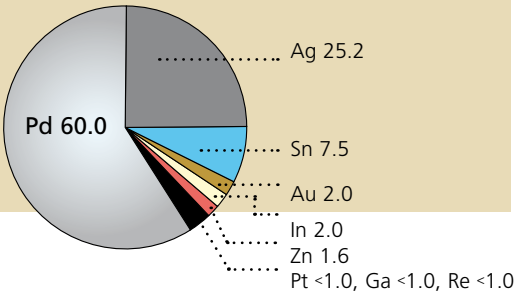
Type	4
Color	White
Density (g/cm³)	11.2
Melting range (°C)	1150 - 1280
CTE 25 °C - 500 °C	14.8
CTE 20 °C - 600 °C	14.9
Elongation (%)	31.0
Vickers hardness	230
0.2 % proof stress (MPa)	560

25 g 576634

CALLISTO® IMPLANT 60

Palladium-based ceramic alloy especially for implant superstructures

Composition in %



Advantages
- High strength
- Economical due to low density
- High corrosion resistance
- Excellent milling properties
- Low melting range

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope/conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

Type	4
Color	White
Density (g/cm³)	10.8
Melting range (°C)	1100 - 1260
CTE 25 °C - 500 °C	14.5
CTE 20 °C - 600 °C	14.8
Elongation (%)	19.0
Vickers hardness	275
0.2 % proof stress (MPa)	610

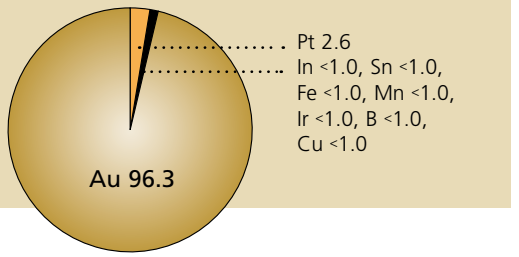
25 g 601960

High gold content

BRITE GOLD™™

High Gold ceramic alloy. Brite Gold exhibits a warm golden yellow color for a natural, esthetic shade effect of the veneer and the required hardness for easy polishing.

Composition in %



Advantages
- Pd-free
- Warm, golden yellow color
- Good melting and flow properties
- Increased hardness / stability
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns

Technical data

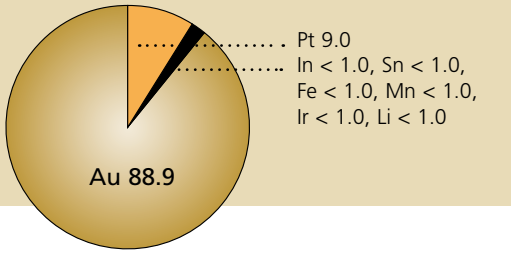
Type	2
Color	Rich yellow
Density (g/cm³)	19.0
Melting range (°C)	1030 - 1070
CTE 25 °C - 500 °C	14.8
CTE 20 °C - 600 °C	15.0
Elongation (%)	15.0
Vickers hardness	100
0.2 % proof stress (MPa)	230

25 g 576590

BRITE GOLD™XH

Brite Gold XH offers a wide range of indications and a golden yellow color for esthetic true-to nature restorations.

Composition in %



Advantages
- Pd- Ag-, Zn-free
- No pickling step after oxidation
- High temperature strength
- Compatible with conventional feldspar ceramics
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

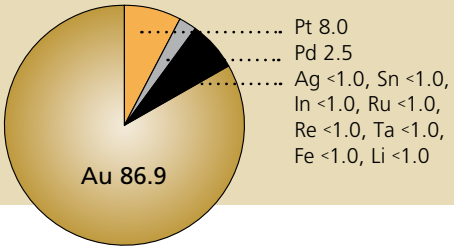
Type	3
Color	Rich yellow
Density (g/cm³)	18.8
Melting range (°C)	1080 - 1150
CTE 25 °C - 500 °C	14.4
CTE 20 °C - 600 °C	14.7
Elongation (%)	11.0
Vickers hardness	180
0.2 % proof stress (MPa)	335

25 g 591347

GOLDEN CERAMIC®

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Ideal golden yellow hue
- Clinically proven
- Light oxide
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, posts, telescope and conus crowns, short and long span bridges

Technical data

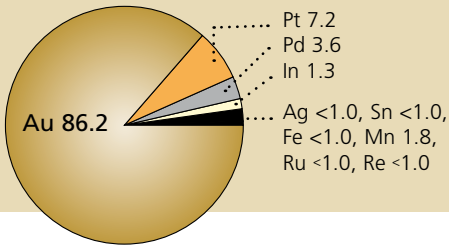
Type	4
Color	Rich yellow
Density (g/cm³)	18.5
Melting range (°C)	1060 - 1140
CTE 25 °C - 500 °C	14.6
CTE 20 °C - 600 °C	14.7
Elongation (%)	12.0
Vickers hardness	165
0.2 % proof stress (MPa)	360

25 g 582898

CALLISTO® 86

High-gold ceramic alloy for high-quality restorations fabricated using the layering and press technique in particular

Composition in %



Advantages
- Warm golden color for esthetic metal-ceramic restorations
- Optimized high-gold ceramic alloy as an economic alternative to high-price gold alloys
- Excellent melting and casting properties resulting in a homogeneous micro-structure

Indication
Inlays, onlays, 3/4 crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

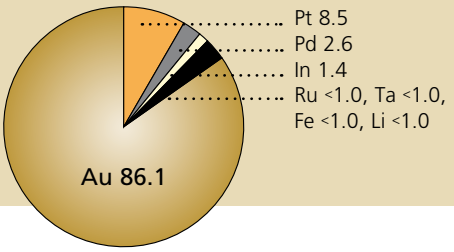
Type	4
Color	Rich yellow
Density (g/cm³)	18.2
Melting range (°C)	1060 – 1165
CTE 25 °C - 500 °C	14.4
CTE 20 °C - 600 °C	14.7
Elongation (%)	12.0
Vickers hardness	180
0.2 % proof stress (MPa)	425

25 g 639451

AQUARIUS HARD

Clinically proven high gold ceramic alloy demonstrating outstanding clinical properties.

Composition in %



Advantages
- Ideal golden yellow color
- Wide range of indications
- Clinically proven
- Light oxide
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

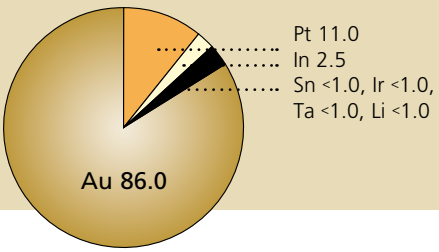
Type	4
Color	Rich yellow
Density (g/cm³)	18.5
Melting range (°C)	1050 - 1145
CTE 25 °C - 500 °C	14.5
CTE 20 °C - 600 °C	14.8
Elongation (%)	13.0
Vickers hardness	205
0.2 % proof stress (MPa)	455

25 g 576617

AQUARIUS

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Ideal golden yellow hue
- Pd- and Cu-free
- Clinically proven
- Easy to process
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, short span bridges

Technical data

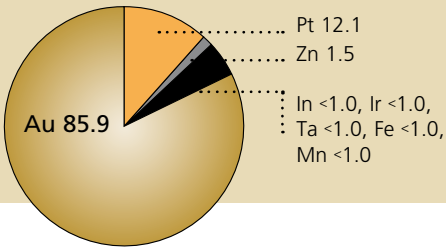
Type	3
Color	Rich yellow
Density (g/cm³)	18.5
Melting range (°C)	1010 - 1135
CTE 25 °C - 500 °C	14.6
CTE 20 °C - 600 °C	14.8
Elongation (%)	12.0
Vickers hardness	160
0.2 % proof stress (MPa)	320

25 g 576619

d.SIGN®. 98

High gold ceramic alloy, free from palladium, silver and copper, demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Pd-, Ag-, Cu-free
- Golden yellow color
- Light oxide
- Wide range of indications
- Certificate for biocompatibility testing

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

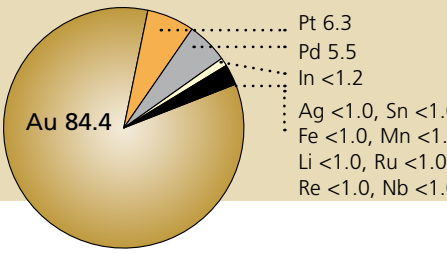
Type	4
Color	Rich yellow
Density (g/cm³)	18.9
Melting range (°C)	1055 - 1170
CTE 25 °C - 500 °C	14.3
CTE 20 °C - 600 °C	14.6
Elongation (%)	8.0
Vickers hardness	220
0.2 % proof stress (MPa)	510

25 g 576611

CALLISTO® 84

Callisto® 84 is a high-gold ceramic alloy with a very rich yellow color for the high-quality layering and press technique.

Composition in %



Advantages
- Optimized high-gold ceramic alloy as an economic alternative to high-price gold alloys
- Excellent melting and casting properties resulting in a homogeneous microstructure

Indication
Inlays, onlays, 3/4 crowns, crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

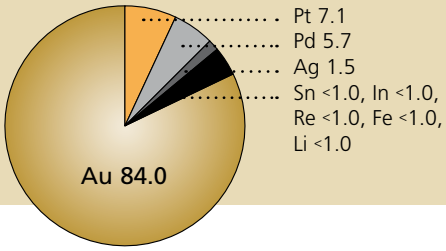
Type	4
Color	Rich yellow
Density (g/cm³)	17.7
Melting range (°C)	1070 – 1175
CTE 25 °C - 500 °C	14.3
CTE 20 °C - 600 °C	14.6
Elongation (%)	15.0
Vickers hardness	180
0.2 % proof stress (MPa)	405

25 g 639436

Y

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Ideal golden yellow hue
- Wide range of indications
- Clinically proven
- Easy to process
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

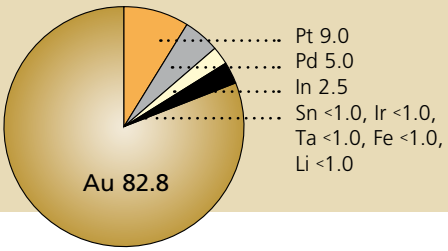
Type	4
Color	Yellow
Density (g/cm³)	17.4
Melting range (°C)	1170 - 1210
CTE 25 °C - 500 °C	14.6
CTE 20 °C - 600 °C	14.7
Elongation (%)	10.0
Vickers hardness	170
0.2 % proof stress (MPa)	435

25 g 582916

AQUARIUS XH

Clinically proven silver-free high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

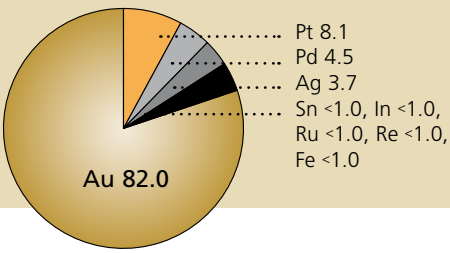
Type	4
Color	Yellow
Density (g/cm³)	17.9
Melting range (°C)	1050 - 1185
CTE 25 °C - 500 °C	14.1
CTE 20 °C - 600 °C	14.4
Elongation (%)	7.0
Vickers hardness	220
0.2 % proof stress (MPa)	510

25 g 576615

Y-2

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

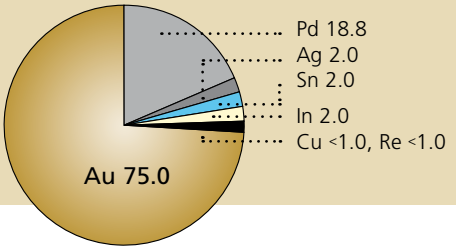
Type	4
Color	Yellow
Density (g/cm³)	17.4
Melting range (°C)	1105 - 1205
CTE 25 °C - 500 °C	15.0
CTE 20 °C - 600 °C	15.1
Elongation (%)	12.0
Vickers hardness	155
0.2 % proof stress (MPa)	380

25 g 582922

Y-LITE

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Light oxide
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

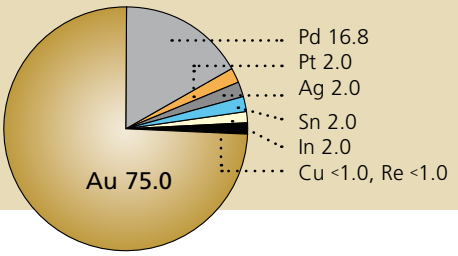
Type	4
Color	Yellow
Density (g/cm³)	16.1
Melting range (°C)	1150 - 1250
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.1
Elongation (%)	14.0
Vickers hardness	225
0.2 % proof stress (MPa)	500

25 g 582928

SAGITTARIUS

Clinically proven high gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

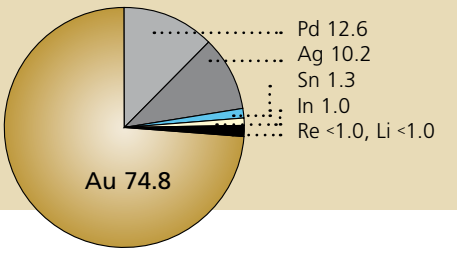
Type	4
Color	White
Density (g/cm³)	16.4
Melting range (°C)	1130 - 1255
CTE 25 °C - 500 °C	14.0
CTE 20 °C - 600 °C	14.3
Elongation (%)	10.0
Vickers hardness	245
0.2 % proof stress (MPa)	580

25 g 576626

Y-1

Clinically proven reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

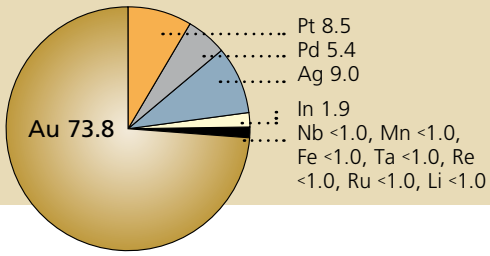
Type	3
Color	Yellow
Density (g/cm³)	16.0
Melting range (°C)	1175 - 1205
CTE 25 °C - 500 °C	14.8
CTE 20 °C - 600 °C	15.0
Elongation (%)	15.0
Vickers hardness	185
0.2 % proof stress (MPa)	340

25 g 582934

d.SIGN® 96

High gold ceramic alloy demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Excellent high temperature strength
- Golden yellow color
- Lighter oxide
- Certificate for biocompatibility testing

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	Yellow
Density (g/cm³)	16.7
Melting range (°C)	1050 - 1170
CTE 25 °C - 500 °C	14.3
CTE 20 °C - 600 °C	14.5
Elongation (%)	14.0
Vickers hardness	215
0,2 % proof stress (MPa)	450

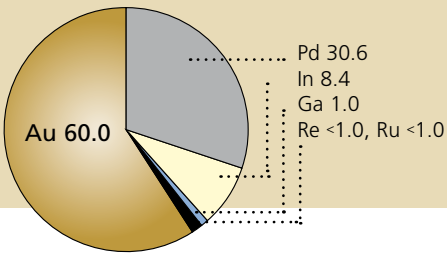
25 g 576609

Reduced gold content

d.SIGN® 91

Extra hard reduced-gold ceramic alloy demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Ag-free and Cu-free
- Increased hardness
- Wide range of indications
- Certified biocompatibility
- Excellent flow properties

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

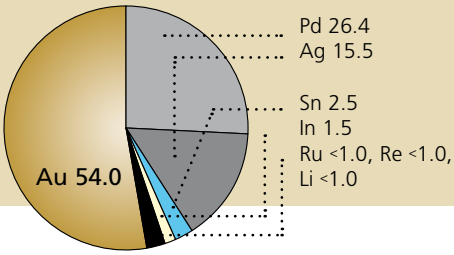
Type	4
Color	White
Density (g/cm³)	14.3
Melting range (°C)	1175 - 1305
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.4
Elongation (%)	31.0
Vickers hardness	250
0.2 % proof stress (MPa)	500

25 g 576608

W

Clinically proven reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Easy to cast
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	White
Density (g/cm³)	13.8
Melting range (°C)	1230 - 1280
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.5
Elongation (%)	21.0
Vickers hardness	220
0.2 % proof stress (MPa)	455

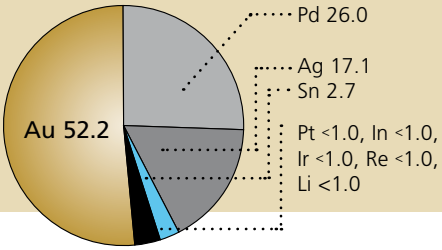
25 g 576635

W-5

Reduced-gold ceramic alloy

Gold containing alloy with ideal mechanical and physical properties for IPS d.SIGN fluorapatite-leucite glass-ceramic and conventional feldspar ceramics.

Composition in %



Advantages
- Excellent melting and flow properties
- Light oxide
- High temperature strength
- Excellent bonding and veneering properties
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

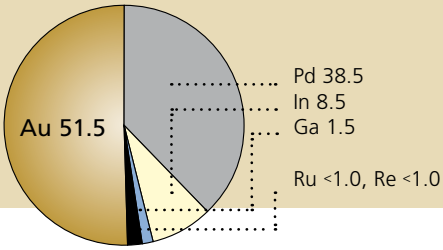
Type	4
Color	White
Density (g/cm³)	13.8
Melting range (°C)	1185 – 1230
CTE 25 – 500°C	14.0
CTE 20 – 600°C	14.2
Elongation (%)	20.0
Vickers hardness	215
0.2 % proof stress (MPa)	505

25 g 582947

LODESTAR®

Clinically proven silver-free reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

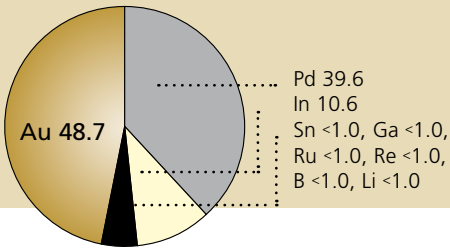
Type	4
Color	White
Density (g/cm³)	13.7
Melting range (°C)	1215 - 1290
CTE 25 °C - 500 °C	14.1
CTE 20 °C - 600 °C	14.3
Elongation (%)	20.0
Vickers hardness	240
0.2 % proof stress (MPa)	495

25 g 576633

W-3®

Clinically proven silver-free reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

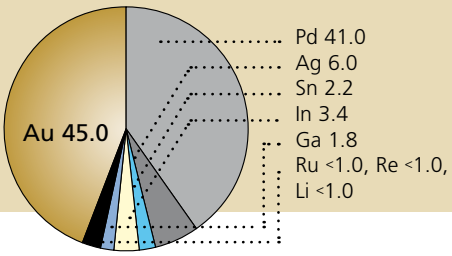
Type	4
Color	White
Density (g/cm³)	13.8
Melting range (°C)	1235 - 1300
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.1
Elongation (%)	17.0
Vickers hardness	225
0.2 % proof stress (MPa)	495

25 g 582940

LEO

Clinically proven reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

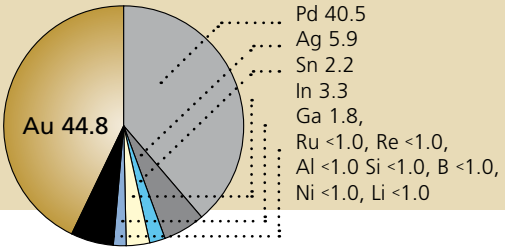
Type	4
Color	White
Density (g/cm³)	13.3
Melting range (°C)	1225 - 1315
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.2
Elongation (%)	21.0
Vickers hardness	190
0.2 % proof stress (MPa)	400

25 g 582965

W-2

Clinically proven reduced-gold ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

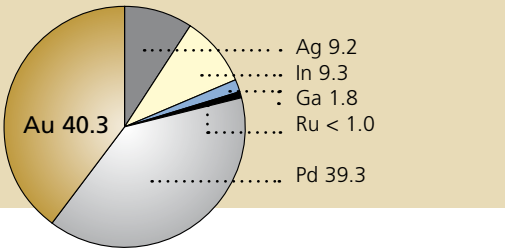
Type	4
Color	White
Density (g/cm³)	13.4
Melting range (°C)	1190 - 1280
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.6
Elongation (%)	20.0
Vickers hardness	205
0.2 % proof stress (MPa)	540

25 g 582953

EVOLUTION®LITE

Gold containing alloy with ideal mechanical and physical properties for IPS InLine® and conventional feldspar ceramics.

Composition in %



Advantages
- Lighter oxide
- Good melting and flow properties
- High resistance to material deformation with multiple firings
- Easy processing and polishing
- High corrosion stability

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

Type	4
Color	White
Density (g/cm³)	12.8
Melting range (°C)	1100 - 1260
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.5
Elongation (%)	11.0
Vickers hardness	280
0.2 % proof stress (MPa)	565

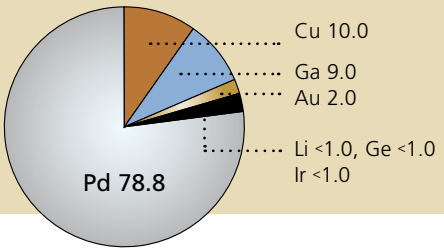
25 g 583653

SPARTAN® PLUS

Pd based

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Ag-free
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

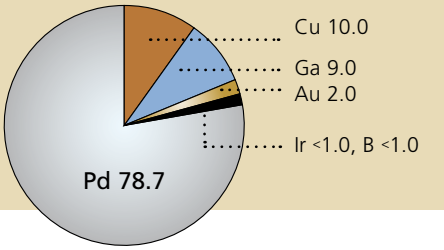
Type	4
Color	White
Density (g/cm³)	10.7
Melting range (°C)	1130 - 1210
CTE 25 °C - 500 °C	14.3
CTE 20 °C - 600 °C	14.6
Elongation (%)	20.0
Vickers hardness	310
0.2 % proof stress (MPa)	795

25 g 582977

SPARTAN®

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Ag-free
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

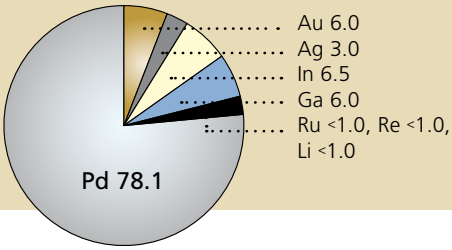
Type	4
Color	White
Density (g/cm³)	10.6
Melting range (°C)	1115 - 1160
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.5
Elongation (%)	19.0
Vickers hardness	360
0.2 % proof stress (MPa)	945

25 g 582971

CAPRICORN

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

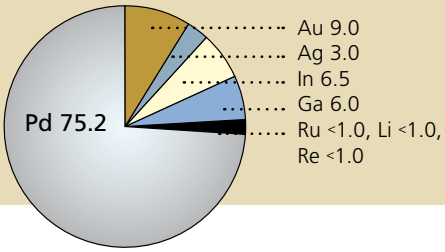
Type	4
Color	White
Density (g/cm³)	11.0
Melting range (°C)	1170 - 1335
CTE 25 °C - 500 °C	14.1
CTE 20 °C - 600 °C	14.3
Elongation (%)	33.0
Vickers hardness	260
0.2 % proof stress (MPa)	525

25 g 576613

d.SIGN® 84

Palladium-based ceramic alloy demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Outstanding high temperature strength
- Excellent melting and flow properties
- Easy processing and polishing
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

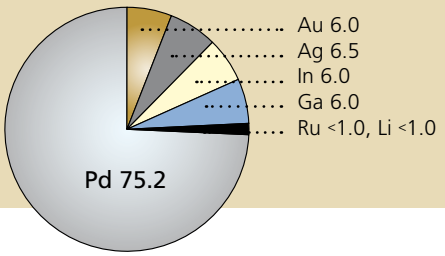
Type	4
Color	White
Density (g/cm³)	11.3
Melting range (°C)	1140 - 1335
CTE 25 °C - 500 °C	13.8
CTE 20 °C - 600 °C	14.0
Elongation (%)	29.0
Vickers hardness	295
0.2 % proof stress (MPa)	495

25 g 576597

PROTOCOL®

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

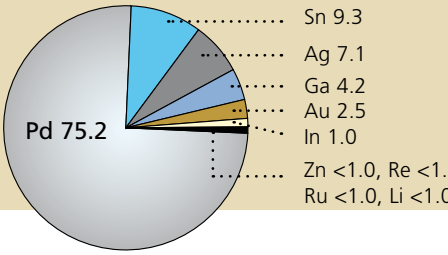
Type	4
Color	White
Density (g/cm³)	11.0
Melting range (°C)	1270 - 1310
CTE 25 °C - 500 °C	13.8
CTE 20 °C - 600 °C	14.0
Elongation (%)	34.0
Vickers hardness	235
0.2 % proof stress (MPa)	500

25 g 582989

CALLISTO® 75 Pd

Callisto® 75 Pd is an economic palladium-based alloy for veneering material in the layering and press technique

Composition in %



Advantages
- Excellent physical properties with high strength values
- Excellent melting and casting properties for a homogeneous micro-structure
- Convenient handling and polishing properties

Indication
Inlays, onlays, 3/4 crowns, single crowns, telescope and conus crowns, posts, short and long span bridges, implant super-structures, partial dentures

Technical data

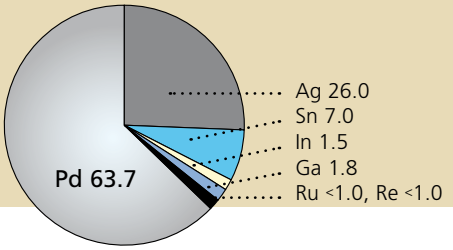
Type	4
Color	White
Density (g/cm³)	10.8
Melting range (°C)	1130 – 1296
CTE 25 °C - 500 °C	13.9
CTE 25 °C - 600 °C	14.2
Elongation (%)	40.0
Vickers hardness	230
0.2 % proof stress (MPa)	500

25 g 632926

ARIES

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

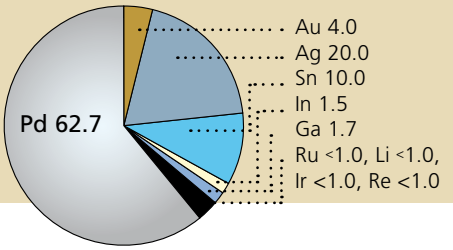
Type	4
Color	White
Density (g/cm³)	10.8
Melting range (°C)	1165 - 1290
CTE 25 °C - 500 °C	14.7
CTE 20 °C - 600 °C	14.8
Elongation (%)	46.0
Vickers hardness	185
0.2 % proof stress (MPa)	415

25 g 576614

d.SIGN® 67

Palladium-silver ceramic alloy demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Excellent high temperature strength
- Outstanding melting and flow properties
- Easy processing and polishing
- Wide range of indications
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

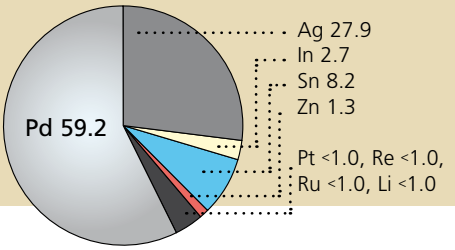
Type	4
Color	White
Density (g/cm³)	10.8
Melting range (°C)	1150 - 1270
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.2
Elongation (%)	15.0
Vickers hardness	240
0.2 % proof stress (MPa)	545

25 g 576596

d.SIGN® 59

d.SIGN is a palladium-silver ceramic alloy. It's mechanical and physical properties are coordinated with the IPS d.SIGN fluorapatite glass-ceramic material.

Composition in %



Advantages
- Excellent melting and flow properties
- Economical, low density
- Light oxide
- Easy processing and polishing
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

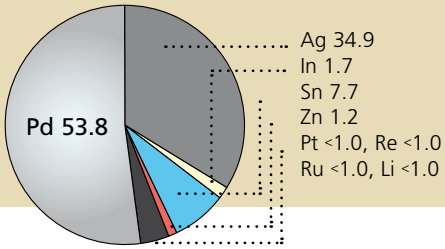
Type	4
Color	White
Density (g/cm³)	10.7
Melting range (°C)	1230 - 1310
CTE 25 - 500 °C	14.5
CTE 20 - 600 °C	14.8
Elongation (%)	14.0
Vickers hardness	230
0.2 % proof stress (MPa)	490

25 g 576595

d.SIGN® 53

d.SIGN 53 is a palladium-silver ceramic alloy. It's mechanical and physical properties are coordinated with the IPS d.SIGN fluorapatite glass-ceramic material.

Composition in %



Advantages
- Economical, low density
- Excellent melting and flow properties
- Light oxide
- Works with IPS d.SIGN and conventional ceramics
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

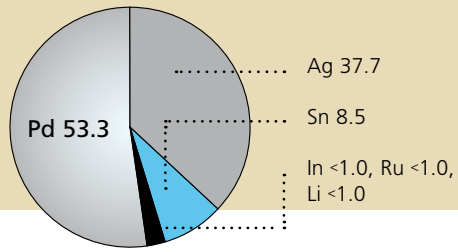
Type	4
Color	White
Density (g/cm³)	10.7
Melting range (°C)	1180 - 1280
CTE 25 - 500 °C	14.8
CTE 20 - 600 °C	15.0
Elongation (%)	13.0
Vickers hardness	250
0.2 % proof stress (MPa)	545

25 g 576594

W-1

Clinically proven palladium-based ceramic alloy demonstrating outstanding properties.

Composition in %



Advantages
- Clinically proven
- Extra hard
- Wide range of indications
- Easy to process
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures

Technical data

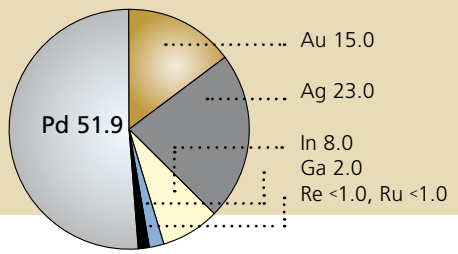
Type	4
Color	White
Density (g/cm³)	11.1
Melting range (°C)	1185 - 1270
CTE 25 °C - 500 °C	15.2
CTE 20 °C - 600 °C	15.4
Elongation (%)	11.0
Vickers hardness	240
0.2 % proof stress (MPa)	450

25 g 582983

CAPRICORN 15

Palladium-silver alloy with coordinated physical and mechanical properties for conventional feldspath ceramics.

Composition in %



Advantages
- Economical, low density
- Favourable flow and casting properties
- Easy processing and polishing
- Suitable for IPS Classic® and conventional ceramics
- Certified biocompatibility

Indication
Inlays, onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

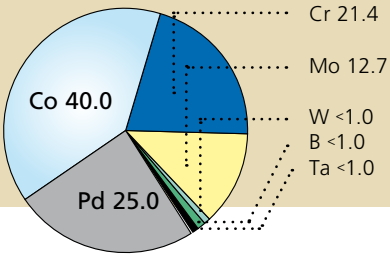
Type	4
Color	White
Density (g/cm³)	11.5
Melting range (°C)	1230 - 1310
CTE 25 °C - 500 °C	14.3
CTE 20 °C - 600 °C	14.5
Elongation (%)	21.0
Vickers hardness	255
0.2 % proof stress (MPa)	490

25 g 577349

CALLISTO® CP+

Palladium containing ceramic-bonded alloy on cobalt basis.

Composition in %



Advantages
- Economical, low density
- Wide range of indications
- Extra-hard, suitable for press technique
- Certified biocompatibility

Indication
Onlays, partial crowns, crowns, PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

Type	5
Color	White
Density (g/cm³)	8.9
Melting range (°C)	1185 - 1275
CTE 25 °C - 500 °C	14.4
CTE 25 °C - 600 °C	14.9
Elongation (%)	10.0
Vickers hardness	365
0.2 % proof stress (MPa)	780

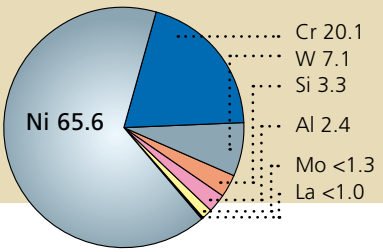
25 g 613970

NiCr based

COLADO® NC

Colado® NC is a Nickel-Chromium ceramic alloy that features coordinated mechanical and physical properties for use with c onventional metal-ceramic and composite materials.

Composition in %



Advantages
- Light oxide
- High temperature strength for accurately fitting resotrations
- No long-term cooling necessary
- High strength values; thus optimally suitable for long-span restorations

Indication
Onlays, 3/4 crowns, ceramic crowns, crowns, telescope and conus crowns, posts, short and long span bridges, partial dentures

Technical data

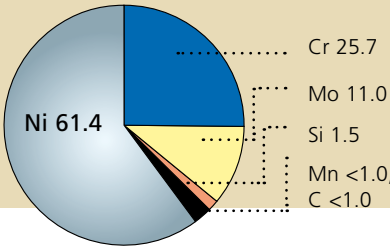
Type	5
Color	White
Density (g/cm³)	8.2
Melting range (°C)	1230 – 1325
CTE 25 °C – 500 °C	14.0
CTE 20 °C – 600 °C	14.5
Elongation (%)	12.0
Vickers hardness	340
0.2 % proof stress (MPa)	640

25 g 637137 250 g 637139
1000 g 637140

4all•

Nickel-Chromium ceramic alloy with ideal mechanical and physical properties for conventional feldspar ceramics.

Composition in %



Advantages
- Excellent melting and flow properties
- Easy to divest
- Reduced hardness
- Works with conventional feldspar ceramics
- Certified biocompatibility

Indication
PFM crowns, telescope and conus crowns, posts, short and long span bridges

Technical data

Type	4
Color	White
Density (g/cm³)	8.4
Melting range (°C)	1260 - 1350
CTE 25 °C - 500 °C	13.9
CTE 20 °C - 600 °C	14.1
Elongation (%)	12.0
Vickers hardness	235
0.2 % proof stress (MPa)	375

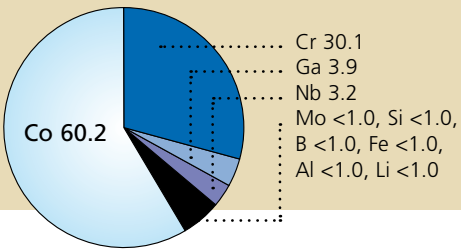
250 g 578891AN
1000 g 578942AN

CoCr based

d.SIGN® 30

Cobalt-chromium ceramic alloy demonstrating mechanical and physical properties that specifically match those of the IPS d.SIGN fluorapatite glass-ceramic.

Composition in %



Advantages
- Reduced hardness
- Easy casting and processing
- Lighter oxide
- Easy to divest
- Certified biocompatibility

Indication
PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

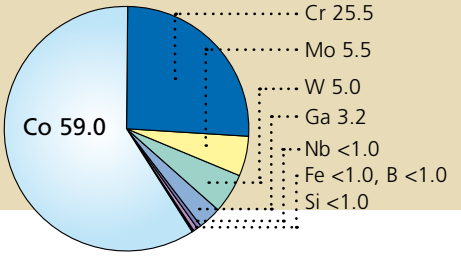
Type	5
Color	White
Density (g/cm³)	7.8
Melting range (°C)	1145 - 1165
CTE 25 °C - 500 °C	14.5
CTE 20 °C - 600 °C	14.7
Elongation (%)	6.0
Vickers hardness	385
0.2 % proof stress (MPa)	520

25 g 575209 150 g 575207

Colado® CC

Cobalt-chronium ceramic alloy with excellent mechanical and pysical properties.

Composition in %



Advantages
- Easy casting and processing
- Easy to divest
- Compatible with ceramic and composite
- High corrosion resistance
- Certified biocompatibility

Indication
PFM crowns, telescope and conus crowns, posts, short and long span bridges, implant superstructures, partial dentures

Technical data

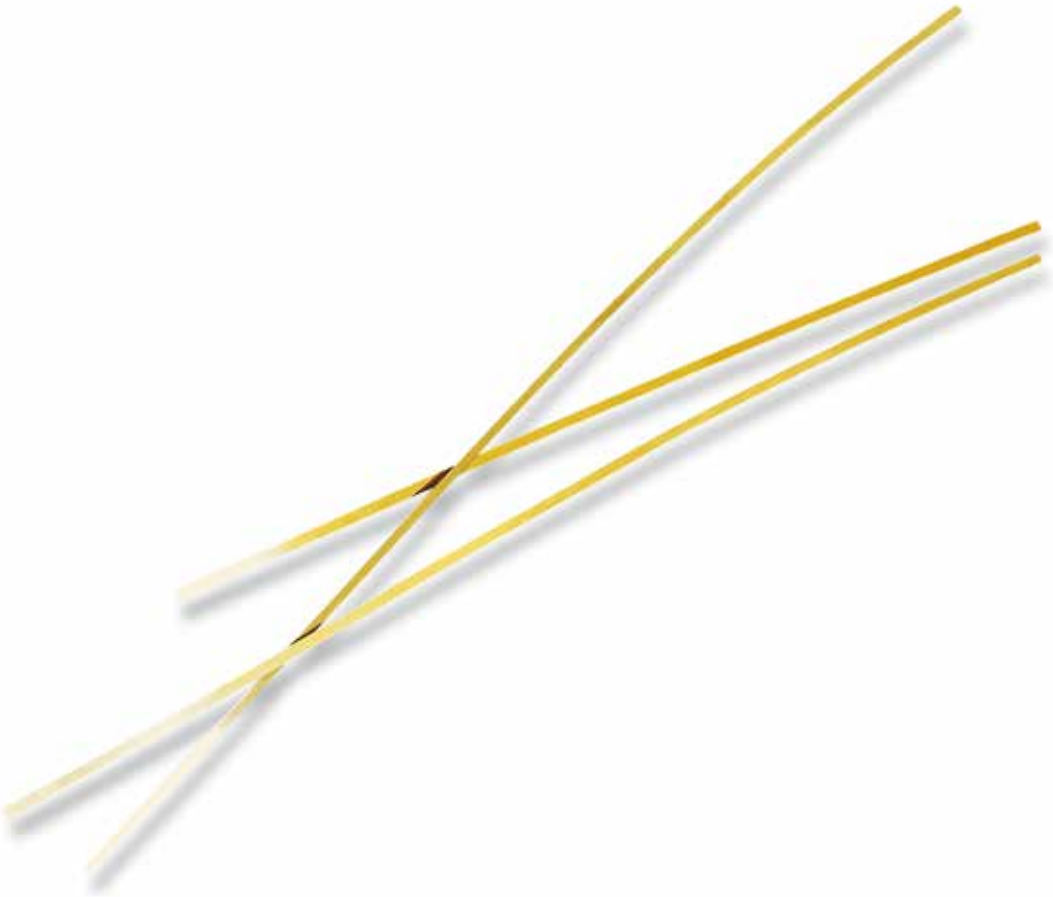
Type	5
Color	White
Density (g/cm³)	8.5
Melting range (°C)	1175 – 1385
CTE 25 °C - 500 °C	14.2
CTE 20 °C - 600 °C	14.5
Elongation (%)	9.0
Vickers hardness	360
0.2 % proof stress (MPa)	500

25 g 627530AN 150 g 627532AN
1000 g 627531AN

SOLDERS

A complete line of solders and brazing materials has been developed and tested for compatibility with the parent alloy.

These solders are compatible with ceramic and crown and bridge alloys. Please consult the alloy property chart for the recommended solder and alloy combination.



PRE-SOLDER

	Composition											Melting Range	Flow Point
Pre-Solder	**Au**	**Pd**	**Ag**	**Cu**	**In**	**Li**	**Mn**	**Ni**	**Ru**	**Zn**	**Others**	**°C**	**°C**
High Fusing Yellow Ceramic Solder (HFYC) NA1190104	80.0	4.2	15.4	–	<1.0	<1.0	–	–	–	1.0	Fe <1.0 Ca, Ti	1085–1115	1100
Y-2 Ceramic Solder NA1190504	80.0	3.1	16.5	–	<1.0	<1.0	–	–	<1.0	–	Fe <1.0	1070–1100	1090
HGPKF 1030 Y (High Gold Palladium Copper free) 593565	63.2	–	35.0	–	–	–	<1.0	–	–	<1.0	Pt <1.0 Ir <1.0	1015–1040	1030
HGPKF 1015 Y (High Gold Palladium Copper free) 579851	60.0	–	36.5	–	<1.0	–	–	–	–	<1.0	Pt <2.1 Ir <1.0 Sn <1.0	975–1035	1015
Aquarius Ceramic Solder NA1192004	56.0	1.9	39.7	–	<1.0	<1.0	1.0	–	–	1.0	Re < 1.0	970–1020	990
Golden Ceramic Solder (GC) NA1191004	54.0	3.9	40.0	–	–	1.0	–	–	–	1.0	B <1.0 Re <1.0	995–1045	1020
Spartan Ceramic Solder NA1190914	50.0	24.0	–	25.0	–	–	–	–	–	1.0	Ir <1.0	1080–1105	1065
Special High Fusing White Ceramic Solder (SHFWC) NA1190704	47.0	10.3	41.0	–	1.4	–	–	–	<1.0	–	B <1.0 Ca <1.0 Ti <1.0	1045–1105	1105
High Fusing White Ceramic Solder (HFWC) NA1190404	45.0	12.4	41.5	–	1.0	<1.0	–	–	<1.0	–	–	1100–1165	1135
Super Solder Ceramic Solder NA1190804	–	53.5	7.0	–	–	<1.0	–	35.6	–	–	Sn 3.8	1085–1180	1135

FLUX: High Fusing Bondal Flux – Ceramic bonded alloys

FLUX: High Fusing Bondal Flux NP – Predominantly base alloys

UNIVERSAL-SOLDER

	Composition							Melting Range	Flow Point
Universal-Solder	**Au**	**Pt**	**Pd**	**Zn**	**Ag**	**In**	**Others**	**°C**	**°C**
Universal Solder PKF 573373	48.8	2.8	–	7.3	40.5	<1.0	Ir <1.0	800-900	850
Universal Solder 1015 W 595611	18.5	–	6.0	–	72.5	3.0	Ir <1.0	985-1025	1015

FLUX: Bondal Flux – Universal Solder PKF

FLUX: High Fusing Bondal Flux – Universal Solder 1015W

POST-SOLDER

	Composition									Melting Range	Flow Point
Post-Solder	**Au**	**Ag**	**Cu**	**Ga**	**In**	**Li**	**Ni**	**Sn**	**Zn**	**°C**	**°C**
High Fusing White Gold Solder (HFWG) NA1185904	79.8	–	–	–	–	<1.0	11.8	–	8.3	880-910	895
.650 Fine Gold Solder NA1184504	65.0	13.0	19.6	2.0	–	–	–	–	<1.0	785-835	830
.615 Fine Solder NA1183504	61.5	13.1	17.4	–	7.6	–	–	–	<1.0	690-775	775
.585 Fine Solder NA1182504	58.5	16.0	18.0	7.2	–	–	–	–	<1.0	610-725	725
Low Fusing White Gold Solder (LFWG) NA1185604	56.1	27.4	–	–	<1.0	–	–	<1.0	15.8	665-710	730

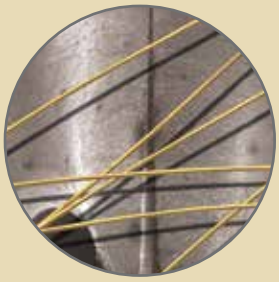
FLUX: Bondal Flux – Crown and bridge alloys, ceramic bonded alloys

FLUX: High Fusing Bondal Flux NP – Predominantly base alloys

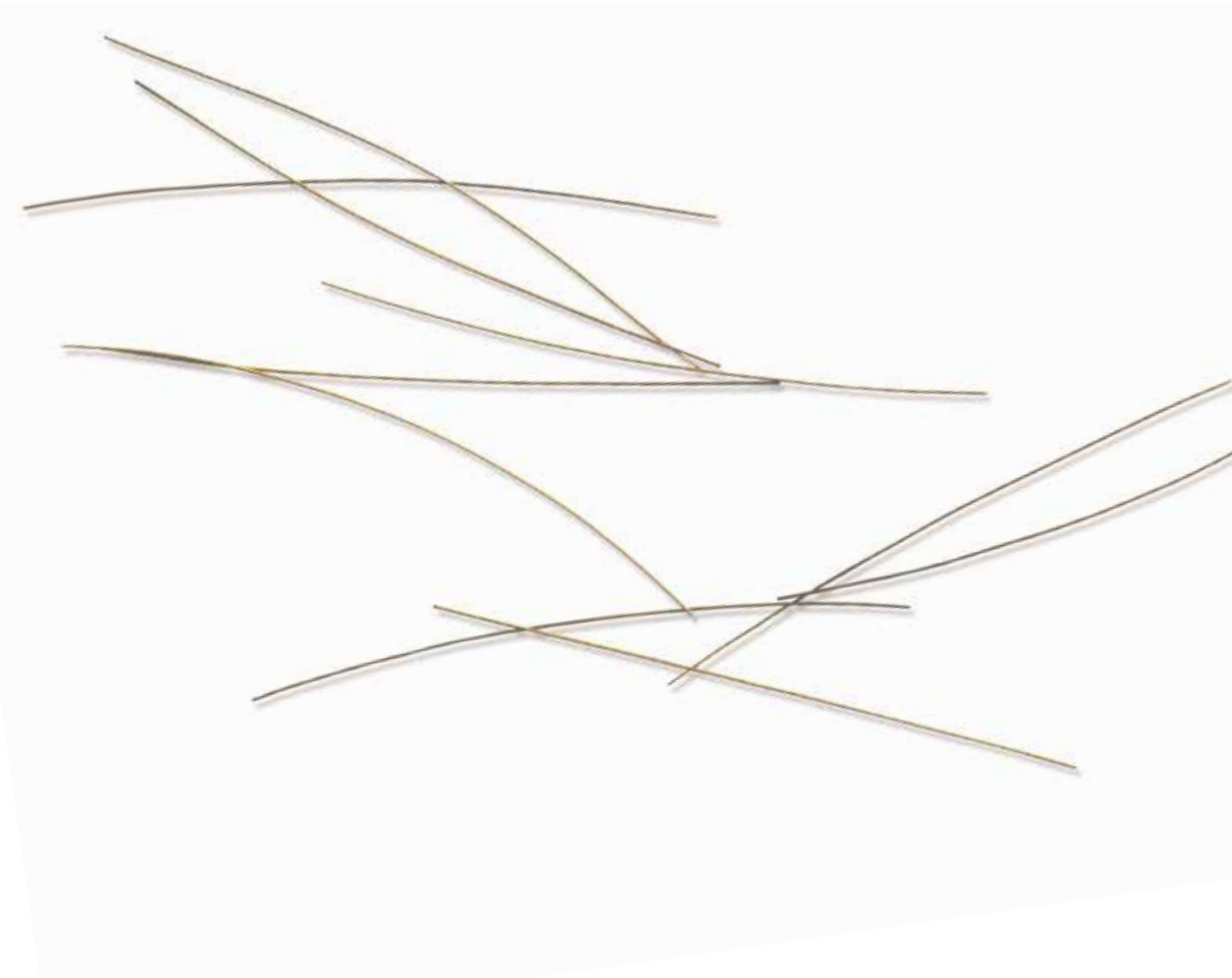
• PHONE: 001 716 691 2921 • FAX: 001 716 691 2285 • E-MAIL: alloys.int@ivoclarvivadent.us.com

LASER WELDING WIRES

Welding with laser beams is becoming increasingly popular in dentistry. The compatibility of the laser welding material to the parent alloy is critical to the process. To support the technique of laser welding our ceramic and crown and bridge alloys, Ivoclar Vivadent, Inc. has developed five laser-welding wires available in two sizes. The .3mm wire is packaged in two forms: 21.6 cm strips, in quantities of five; and spools of 121.9 cm wire, on round coils. The .5mm wire is packaged in two forms: 21.6 cm strips, in quantities of three; and spools of 66 cm wire, on round coils.



These wires are compatible with ceramic, universal, and crown and bridge alloys. Please consult the alloy property chart for the recommended welding wire and alloy combination.



LASER WELDING WIRES

		Composition								Melting Range
		Au	Pt	Pd	Ag	Cu	In	Zn	Others	°C
Laser Ceramic Yellow PdF NA1194304	Wire 3mm	85.9	12.09	–	–	–	<1.0	1.5	Fe/Mn <1.0 Ir <1.0, Ta <1.0	1055-1170
Laser Ceramic Yellow PdF NA1195304	Spool 3mm	85.9	12.09	–	–	–	<1.0	1.5	Fe/Mn <1.0 Ir <1.0, Ta <1.0	1055-1170
Laser Ceramic Yellow PdF NA1194804	Wire 5mm	85.9	12.09	–	–	–	<1.0	1.5	Fe/Mn <1.0 Ir <1.0, Ta <1.0	1055-1170
Laser Ceramic Yellow PdF NA1195804	Spool 5mm	85.9	12.09	–	–	–	<1.0	1.5	Fe/Mn <1.0 Ir <1.0, Ta <1.0	1055-1170
Laser Ceramic Yellow NA1194204	Wire 3mm	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	1085-1215
Laser Ceramic Yellow NA1195204	Spool 3mm	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	1085-1215
Laser Ceramic Yellow NA1194704	Wire 5mm	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	1085-1215
Laser Ceramic Yellow NA1195704	Spool 5mm	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	1085-1215
Laser C&B Yellow NA1194504	Wire 3mm	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	900-960
Laser C&B Yellow NA1195504	Spool 3mm	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	900-960
LaserC&B Yellow NA1195004	Wire 5mm	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	900-960
Laser C&B Yellow NA1196004	Spool 5mm	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	900-960
Laser Ceramic White NA1194104	Wire 3mm	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	1200-1290
Laser Ceramic White NA1195104	Spool 3mm	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	1200-1290
Laser Ceramic White NA1194604	Wire 5mm	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	1200-1290
Laser Ceramic White NA1195604	Spool 5mm	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	1200-1290
Laser C&B White NA1194404	Wire 3mm	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	985-1025
Laser C&B White NA1195404	Spool 3mm	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	985-1025
Laser C&B White NA1194904	Wire 5mm	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	985-1025

FOILS AND JEWELRY CASTING GOLDS

24K Casting Gold (Gold Ingots)
NA1050204

14K Jewelry Gold (Gold Shot Form)
NA1510133

PLATINUM FOIL

For use in various laboratory processes, Platinum foil is ideal for the fabrication of ceramic veneers and single unit restorations.

Platinum Foil .001 (1.55 g)
NA1400103

Platinum Foil .0005 (0.775 g)
NA1400101

PALLADIUM FOIL

Palladium Foil .001 (1.55 g)
NA1500301

CONSUMABLES

WAXES

Ivoclar Vivadent, Inc. Premium Pro-Art® waxes are specifically formulated to provide technicians with better handling characteristics and higher opacity than the leading waxes. Pro-Art® opaque waxes allow for better visualization of detail and shape during the wax-up preparation and after its completion.

With Pro-Art® waxes, you have the ability to reproduce detail exactly for more precise contour, occlusion and anatomy.

PRO-ART® PREMIUM WAX

- Excellent modeling properties.
- Allows visualization of anatomical forms during all phases of build up.
- Available in two grades of opacity – opaque and slightly opaque.

Pro-Art Sculpturing Wax (Red) 45 gm tin	NA2260617
Pro-Art Sculpturing Wax (Blue) 45 gm tin	NA2260619
Pro-Art Sculpturing Wax (Brown) 45 gm tin	NA2260621
Pro-Art Sculpturing Wax (Violet) 45 gm tin	NA2260623
Pro-Art Sculpturing Wax (Green) 45 gm tin	NA2260625
Pro-Art Sculpturing Wax (Opaque Beige w/Brn) 45 gm tin	NA2260627
Pro-Art Sculpturing Wax (Opaque Beige) 45 gm tin	NA2260629
Pro-Art Sculpturing Wax (Opaque Grey) 45 gm tin	NA2260631
Pro-Art Cervical Wax (Red) 45 gm tin	NA2260601
Pro-Art Sticky Wax (Beige) 45 gm tin	NA2260603
Pro-Art Margin Wax (Bordeaux) 45 gm tin	NA2260605

PRO-ART® MILLING WAX

- High strength and stability makes it ideal for all milling techniques.
- Carveable with rotating carbide instruments.

Pro-Art Milling Wax (Green) 45 gm tin	NA2260607
Pro-Art Milling Wax (Opaque Grey) 45 gm tin	NA2260609

IPS EMPRESS® WAX

- Created specifically for use with the IPS Empress a all Ceramic Restorative System.
- Designed to have the lowest ash content to ensure that no residue is incorporated into the pressed ceramic.

Pro-Art IPS Empress Wax (Beige) 45 gm tin	NA2260611

PRO-ART® SCULPTURING WAX w / Magnetic Stand

Pro-Art Wax Chip w/Magnetic Stand 20 gm chip (available in Beige sculpturing wax only)	NA2260635
Pro-Art Wax Chip Refills (Opaque Beige) 3 x 20 gm chips	NA2260637
Pro-Art Wax Chip Refills (Opaque Grey) 3 x 20 gm chips	NA2260639
Pro-Art Wax Chip Refills (Red sculpturing) 3 x 20 gm chips	NA2260641
Pro-Art Wax Chip Refills (Bordeaux margin) 3 x 20 gm chips	NA2260643
Pro-Art Wax Chip Refills (Green milling) 3 x 20 gm chips	NA2260645

DIPPING WAX CHIPS

- Resists crushing and deformation.
- Extremely elastic properties.
- Results in precise and even copings thus limiting the amount of grinding.
- Resists formation of drops and thin edges.

Pro-Art Dipping Wax (Yellow) 80 gm	NA2260646

Pro-Art Accessories

Pro-Art Preparation Set	NA2260659
Pro-Art Clear Spacer Set 3 x 20 ml, 1 thinner	NA2260667
Pro-Art Thinner 3 x 20 ml	NA2260668
Pro-Art Spacer Set Yellow	NA2260669
Pro-Art Separating Liquid 250 ml bottle	NA2260671
Pro-Art Occlusion Powder 17 gm bottle	NA2260661
Pro-Art Wax Brush	NA2260663

Pro-Art Polishing Wheels

(50-22 mm wheels per pkg.)	NA2260665

TRI-WAX® SPRUE SYSTEM

Tri-Wax Sprues offer convenience, consistency, quality performance that promotes laboratory productivity and decreases labor costs.

- Reservoir size reduces porosity and gives better density.
- Preformed shape enhances convenience and increases control by eliminating suckback.
- Reduces cracking because Tri-Wax won't impregnate the investment.

Tri-Wax Sprues Direct Large, 8 ga.	(250/pkg)	NA2260450
Tri-Wax Sprues Direct Small, 10 ga.	(250/pkg)	NA2260453
Tri-Wax Direct Mini Sprue, 12 ga.	(250/pkg)	NA2260501
Tri-Wax Large Indirect Sprue, 4 ga.	(50/pkg)	NA2260456
Tri-Wax Small Indirect Sprue, 6 ga.	(50/pkg)	NA2260461
Tri-Wax Buttons	(100/pkg)	NA2260491
Tri-Wax Rods, 6 ga.	(50/pkg)	NA2260481
Tri-Wax Rods, 8 ga.	(50/pkg)	NA2260482
Tri-Wax Rods, 10 ga.	(50/pkg)	NA2260483

HI-HEAT QUARTZ CRUCIBLE

The large, flat melting area allows more alloy of various shapes to be heated evenly, an important factor in the proper melting of nickel base alloys. The design of this crucible reflects heat for more uniform melting.

Hi-Heat Quartz Crucible	NA2120117

INDUCTOCAST® CRUCIBLES

These crucibles are specifically designed for use with the Williams Inducto-cast Machine.

For Models M34A, M34AD and 81M97:

PL55S Crucible (to accept graphite liner)	NA2120114
PL55L Graphite Liner - large	NA2120115
P89S Crucible Shell (Model M34A)	NA2120103
Cover for P89S	NA2120105
P89L Graphite Crucible Insert (Model M34A)	NA2120104
No. 3 Hooded Crucible (Model M34A)	NA2120110

QUARTZ PROBING RODS

Used for probing both precious and non-precious alloys while casting either inductively or with a torch.

Quartz Probing Rods (3/pkg.)	NA2120111

GLASS BEADS

Used to remove refractory material from porcelain laminates, inlays, onlays, and crowns without abrading, and to remove investment from either ceramic or metal surfaces.

80 Micron Glass Beads - 15 lb. pail	NA2040420
80 Micron Glass Beads - 50 lb. pail	NA2040421

ALUMINUM OXIDE BLASTING COMPOUND

Aluminium Oxide blasting compound is used to air abrade the metal surface prior to porcelain application. Consistent particle size provides an even surface
finish which helps insure proper oxidation and tenacious bonding of porcelain to metal.The material is of the purest optical grade available in the dental industry.

Aluminum Oxide Blasting Compound (280 micron)– 15 lb. pail.	NA2040410
Aluminum Oxide Blasting Compound (50 micron)– 15 lb. pail.	NA2040414
Aluminum Oxide Blasting Compound (100 micron)– 50 lb. pail.	NA2040511
Aluminum Oxide Blasting Compound (280 micron)– 50 lb. pail.	NA2040411
Aluminum Oxide Blasting Compound (50 micron)– 50 lb. pail.	NA2040412

DOUBLE TAKE®

Double Take is a low-shrinkage duplication silicone with a mixing of 1:1 ratio between base and catalyst without a vacuum mixer. The setting time of just 30 minutes allows the quick fabrication of a duplicated model.
Excellent detail reproduction and dimension stability lead to perfect duplicates. Due to the high flexibility even undercuts areas can be reproduced very easily.

Advantages
- Easy and safe to use
- Reproduction of precise models
- Can be used with most model materials
- Time saving

Double Take 1 kg / 1 kg	563050AN
Double Take 5 kg / 5 kg	563191AN
Double Take 250 g Trial	564619AN

GINGITECH™

Gingitech is a highly elastic, gingival-coloured silicone for the fabrication of gingival masks. Due to the preproduction of the tissue the prosthetic restoration can be perfectly adapted, especially concerning the functional design of interdental areas and the correct placement of attachments.

Advantages
- Reproduction of the natural tissue situation
- Easy and economical to use

Gingitech Intro Kit	563052AN
Gingitech Refill	563053AN
Mixing Tips	563194AN
Injection Tips	563195AN
Gingitech Dispenser	563054AN

BONDAL™ FLUX

Bondal Flux is a petroleum-based material for solders with a low working temperature:
< 900°C / <1652°F
For use with all C&B alloys, universal alloys and ceramic alloys (soldering after ceramic firing).

.5 oz. jar. NA2100305

HIGH-FUSING BONDAL™ FLUX

The high-fusing Bondal Flux is a water soluble material for solders with a high working temperature:
> 960°C / > 1760°F
For use with all ceramic alloys (soldering before firing), implant alloys and predominantly base alloys.

.5 oz. jar. NA2100302

HIGH-FUSING BONDAL™ FLUX NP

The high-fusing Bondal Flux NP is a special flux for use when soldering non-precious alloys (soldering before and after firing). Non-precious alloys may be soldered to alloys with a high gold content.

.5 oz. jar. 627171

HOW TO ORDER:

IVOCLAR VIVADENT, INC. MAKES ORDERING EASY:

Ivoclar Vivadent, Inc. is committed to making ordering easy and efficient. Our Technical Customer Service Representatives can explain our products and services to you. You may contact us Monday through Friday 8:00 a.m.–4:30 p.m. (EST) via
PHONE: 001 716 691 2921,
FAX: 001 716 691 2285 or
E-MAIL: alloys.int@ivoclarvivadent.us.com

In addition to payments by check and payment in advance, Ivoclar Vivadent, Inc. accepts MasterCard, Visa, Discover and American Express.

TERMS OF SALE/PURCHASING OPTIONS:

- Payment due Net 30 days from invoice date, unless other agreements are made with the Credit Manager.
- All past due transactions incur interest charges of 1.5% per month (18% per year)
- Shipments are C.I.F. Amherst, NY.
- All prices are subject to change without notice.

DELIVERY SERVICES:

- Our standard international shipping methods are DHL Worldwide Express, Federal Express or UPS International.
- Alternative services are available to meet your needs. Please contact our Technical Customer Service Representatives for details and shipping quotations.

PRODUCT RETURN POLICY:

I. CONSUMABLES: (Porcelain, Merchandise, etc.)

- Must be in saleable condition to receive credit.
- Discontinued, obsolete, expired, damaged or opened items will not be accepted for credit.
- Amount credited will be based on invoice price less 15% restocking fee. Invoice must accompany product return.
- Shipping charges are the responsibility of the customer.

II. ALLOYS:

- Return of High Noble and Noble metal products in saleable condition will be credited based on invoice or current market value (if lower) less $15.00 per ounce. Such products which are not in saleable condition will be processed by refining and credit will be calculated accordingly.
- Predominantly base metal returned will be credited based on invoice less $1.50 per ounce.
- Invoice must accompany product return.
- Shipping charges are the responsibility of the customer.

III. EQUIPMENT:

- In order to receive credit, equipment must be returned within 30 days of invoice date.
- Invoice must accompany product return.
- Equipment under warranty will be repaired according to terms of the specific equipment warranty.
- Equipment out of warranty will be repaired and charged at an appropriate amount for time and materials.
- Shipping charges for all equipment handling are the responsibility of the customer.

NOTICE:
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• PHONE: 001 716 691 2921 • FAX: 001 716 691 2285 • E-MAIL: alloys.int@ivoclarvivadent.us.com

• PHONE: 001 716 691 2921 • FAX: 001 716 691 2285 • E-MAIL: alloys.int@ivoclarvivadent.us.com

• PHONE: 001 716 691 2921 • FAX: 001 716 691 2285 • E-MAIL: alloys.int@ivoclarvivadent.us.com

EC Representative:
Ivoclar Vivadent AG
Bendererstrasse 2
FL-9494 Schaan
Principality of Liechtenstein
Phone +423 / 235 35 35
Fax +423 / 235 33 60
www.ivoclarvivadent.com

Manufacturer:
Ivoclar Vivadent, Inc.
175 Pineview Drive
USA, Amherst, NY 14228
Phone 001 716 691 0010
Fax 001 716 691 2285
www.ivoclarvivadent.us.com

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