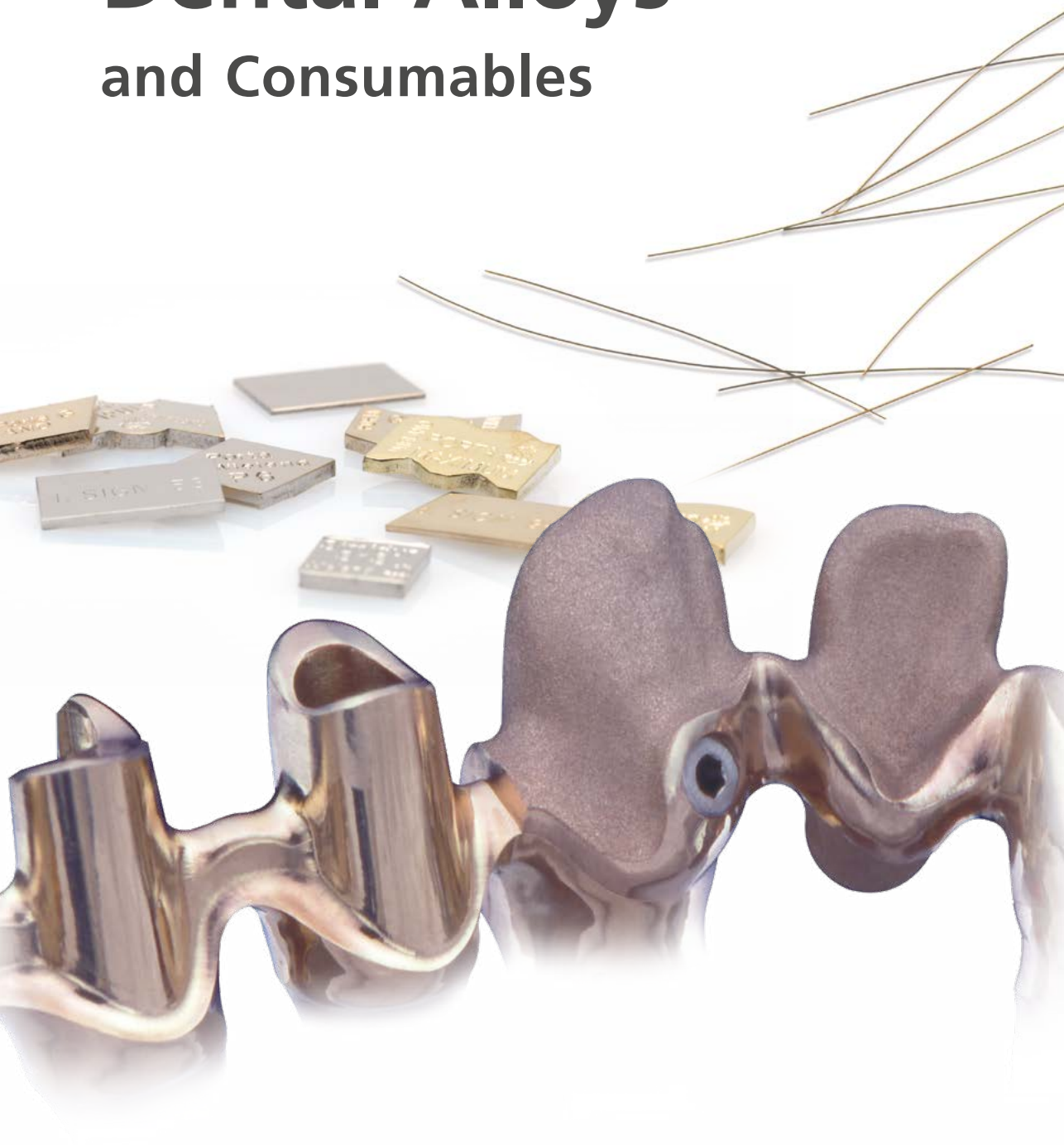
Dental Alloys
and Consumables



Product Catalog

Global markets 2020

ivoclar vivadent®
passion vision innovation

Dental Alloys

The range of alloys may vary from country to country.
For further information please see Instructions for Use or visit our website:
www.ivoclarvivadent.com

Consumables

Complete range of alloys

We can look back on a long history of developing high-quality biocompatible dental alloys. Each alloy product is subject to stringent quality checks. You can flexibly select the best alloy that suits the given indication. The range of alloys includes high-gold alloys, gold-reduced alloys, palladium-based alloys and non-precious alloys.

Academy Gold

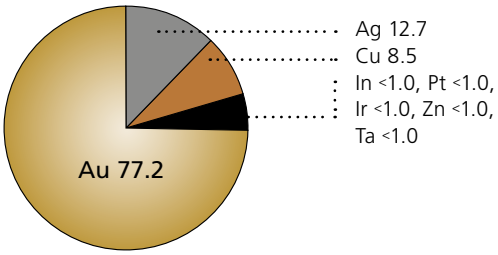
		5 g	25 g	31 g
Crown and bridge alloys	High gold content	**579767**	**576588**	**579769**

Academy Gold® is a high-precious, palladium-free casting alloy with an intensive golden yellow colour. The fine metal structure gives this alloy a high degree of tensile strength, which makes it ideal for inlays and onlays.

Advantages
- Pd-free
- Esthetic golden yellow colour
- Excellent marginal adaptation, also after tempering
- Excellent casting and processing properties
- Veneering with laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, 3/4 crowns, crowns

Composition in %



Technical data

Composition (%):	Au 77.2 | Ag 12.7 | Cu 8.5 Pt <1.0, In <1.0, Ir<1.0, Zn <1.0, Ta <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	2 / Rich Yellow
Density (g/cm³):	15.9
Melting Range (Solidus/Liquidus):	900 – 940 °C
Elastic Modulus (GPa):	88
	As Cast
Vickers Hardness:	125
Strength (MPa):	405
0.2% Proof Stress (MPa):	240
Elongation (%):	45

Harmony® Hard

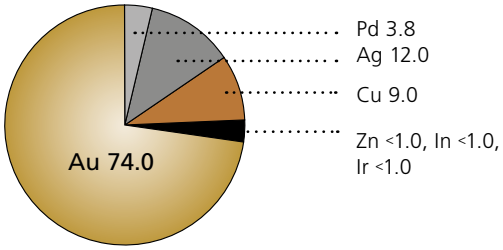
		5 g	25 g	31 g
Crown and bridge alloys	High gold content	**582072**	**582074**	**582075**

Harmony® Hard is a high gold casting alloy with a distinct yellow colour. Due to the good processing properties and the wide range of indications when heat-treated, this alloy can be used for many different applications.

Advantages
- Distinct yellow colour
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays,
- Onlays, 3/4 crowns, crowns

Composition in %



Technical data

Composition (%):	Au 74.0| Pd 3.8| Ag 12.0 | Cu 9.0 In <1.0, Ir <1.0, Zn <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	2 / Yellow
Density (g/cm³):	14.9
Melting Range (Solidus/Liquidus):	895 - 970 °C
Elastic Modulus (GPa):	86
	As Cast
Vickers Hardness:	130
Tensile Strength (MPa):	430
0.2% Proof Stress (MPa):	260
Elongation (%):	40

* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Harmony® PF

		5 g	25 g	31 g
Crown and bridge alloys	High gold content	**582013**	**576600**	**582015**

Harmony® PF is a high gold, palladium-free casting alloy. The well-balanced composition of this alloy means a wide range of indications can be produced and veneered with the laboratory composite SR Nexco®.

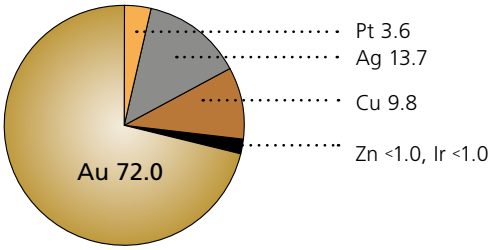
Advantages
- Pd-free
- Clinically proven
- Wide range of indications
- Excellent resistance to oral conditions
- Veneering with laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, 3/4 crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 72.0 | Pt 3.6 | Ag 13.7 | Cu 9.8 Ir <1.0, Zn <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	15.6
Melting Range (Solidus/Liquidus):	900 – 940 °C
Elastic Modulus (GPa):	135
	As Cast
Vickers Hardness:	230
Tensile Strength (MPa):	650
0.2% Proof Stress (MPa):	525
Elongation (%):	18

Composition in %



XL-X®

		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**582197**	**582199**	**582200**

XL-X® is a gold-reduced, low-density casting alloy for economical use. Its composition gives this alloy a golden yellow colour and allows for a wide range of indications.

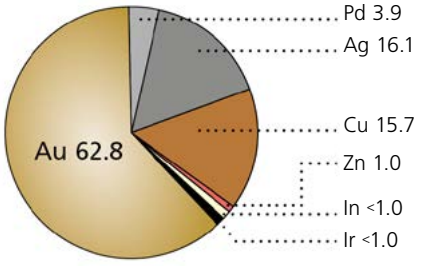
Advantages
- Golden yellow colour
- Economical use due to low density
- Wide range of indications
- Veneering with laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 62.8 | Pd 3.9 | Ag 16.1 | Cu 15.7 Zn 1.0 | Ir <1.0 | In <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	13.9
Melting Range (Solidus/Liquidus):	870 – 910 °C
Elastic Modulus (GPa):	105
	As Cast
Vickers Hardness:	270
Tensile Strength (MPa):	790
0.2% Proof Stress (MPa):	690
Elongation (%):	13

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

X-L®

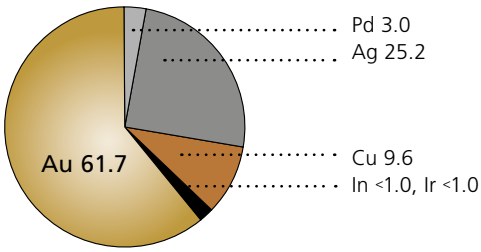
		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**582191**	**582193**	**582194**

X-L® is a gold-reduced casting alloy with a golden yellow colour. The coordinated material properties allow successful clinical use in various different areas of indication.

Advantages
- Golden yellow colour
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Composition in %



Technical data

Composition (%):	Au 61.7 | Pd 3.0 | Ag 25.2 | Cu 9.6 In <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	14.0
Melting Range (Solidus/Liquidus):	890 – 950 °C
Elastic Modulus (GPa):	105
	As Cast
Vickers Hardness:	150
Tensile Strength (MPa):	500
0.2% Proof Stress (MPa):	26
Elongation (%):	26

Maxigold®

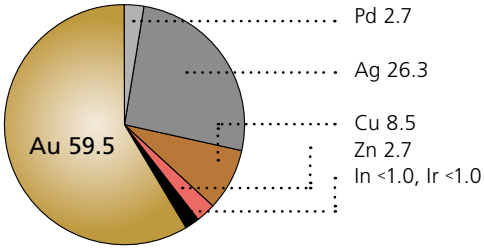
		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**582054**	**576629**	**582056**

Maxigold® is a gold-reduced casting alloy with a wide range of indications. It is easy to process and its golden yellow colour allows natural shade effects in the restoration veneered with laboratory composite SR Nexco®.

Advantages
- Golden yellow colour
- Easy processing
- Wide range of indications
- Veneering with laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Composition in %



Technical data

Composition (%):	Au 59.5 | Pd 2.7 | Ag 26.3 | Cu 8.5 Zn 2.7 | In <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	13.9
Melting Range (Solidus/Liquidus):	840 – 890 °C
Elastic Modulus (GPa):	130
	As Cast
Vickers Hardness:	225
Tensile Strength (MPa):	620
0.2% Proof Stress (MPa):	525
Elongation (%):	18

Harmony® C&B 55

		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**582215**	**582217**	**582218**

Harmony® C&B 55 is a gold-reduced, golden yellow casting alloy for economical use. Its low hardness enables easy and fast surface finishing.

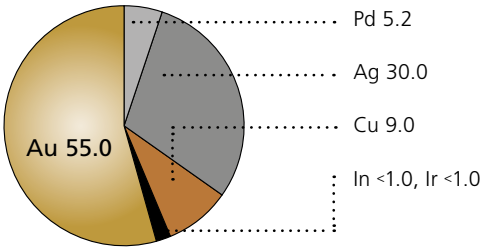
Advantages
- Golden yellow colour
- Clinically proven
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Au 55.0 | Pd 5.2 | Ag 30.0 | Cu 9.0 In <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	13.6
Melting Range (Solidus/Liquidus):	905 – 975 °C
Elastic Modulus (GPa):	120
	As Cast
Vickers Hardness:	185
Tensile Strength (MPa):	575
0.2% Proof Stress (MPa):	425
Elongation (%):	19

Composition in %



Midigold 50®

		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**583044**	**583046**	**583047**

Midigold 50® is a gold-reduced, golden yellow casting alloy. The well-coordinated material properties enable successful clinical use in a wide range of different indications.

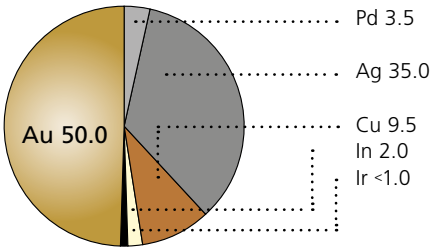
Advantages
- Golden yellow colour
- Clinically proven
- Wide range of indications
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 50.0 | Pd 3.5 | Ag 35.0 | Cu 9.5 In 2.0 | Ir <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	13.2
Melting Range (Solidus/Liquidus):	835 – 915 °C
Elastic Modulus (GPa):	95
	As Cast
Vickers Hardness:	190
Tensile Strength (MPa):	610
0.2% Proof Stress (MPa):	490
Elongation (%):	10

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Minigold®

		5 g	25 g	31 g
Crown and bridge alloys	Reduced gold content	**582062**	**576628**	**582064**

Minigold® is a gold-reduced casting alloy. Its composition makes it suitable for a wide range of indications and its golden yellow colour allows natural shade effects in the restoration veneered with laboratory composite SR Nexco®.

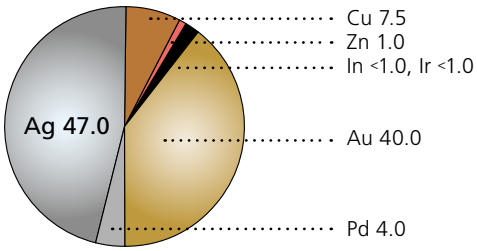
Advantages
- Golden yellow colour
- Wide range of indications
- Veneering with laboratory composites (e.g. SR Nexco®)
- Excellent resistance to oral conditions
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Au 40.0 | Pd 4.0 | Ag 47.0 | Cu 7.5 Zn 1.0 | In <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	12.4
Melting Range (Solidus/Liquidus):	865 – 945 °C
Elastic Modulus (GPa):	88
	As Cast
Vickers Hardness:	190
Tensile Strength (MPa):	600
0.2% Proof Stress (MPa):	430
Elongation (%):	15

Composition in %



Solarcast® 20

		5 g	25 g	31 g
Crown and bridge alloys	Containing Pd/Ag	**582203**	**582205**	**582206**

Solarcast® 20 is a silver and palladium-based, golden casting alloy. Its high strength allows a wide range of indications, especially for wide restorations.

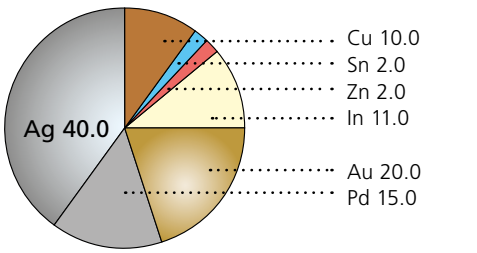
Advantages
- Yellow colour
- High strength
- Wide range of indications
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Partial dentures

Technical data

Composition (%):	Ag 40.0 | Pd 15.0 | Au 20.0 Cu 10.0 | In 11.0 | Sn 2.0 | Zn 2.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	750 – 840 °C
Elastic Modulus (GPa):	90
	As Cast
Vickers Hardness:	195
Tensile Strength (MPa):	570
0.2% Proof Stress (MPa):	450
Elongation (%):	5

Composition in %



Harmony® 3

		5 g	25 g	31 g
Crown and bridge alloys	Containing Pd/Ag	**608222**	**608224**	**608225**

Harmony® 3 is a silver and palladium-based casting alloy. Its high strength and low density make it an economical alternative to base metal alloys.

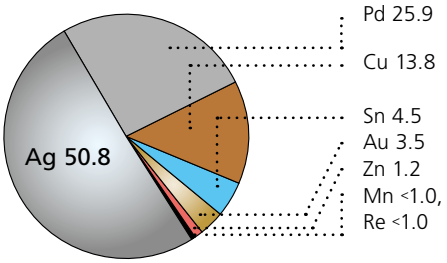
Advantages
- High strength
- Economical due to low density
- Excellent processing properties
- Excellent polishing properties
- Veneering with laboratory composites (e.g. SR Nexco®)

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Ag 50.8 | Pd 25.9 | Cu 13.8 Sn 4.5 | Au 3.5 | Zn 1.2 | Mn <1.0, Re <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.6
Melting Range (Solidus/Liquidus):	880 – 960 °C
Elastic Modulus (GPa):	106
	As Cast
Vickers Hardness:	230
Tensile Strength (MPa):	610
0.2% Proof Stress (MPa):	430
Elongation (%):	10

Composition in %



Harmony® 2

		5 g	25 g	31 g
Crown and bridge alloys	Containing Pd/Ag	**643610**	**643609**	**643607**

Harmony® 2 is an economical, golden casting alloy. It is ideally suited for the fabrication of short crowns and bridges veneered with the laboratory SR Nexco®.

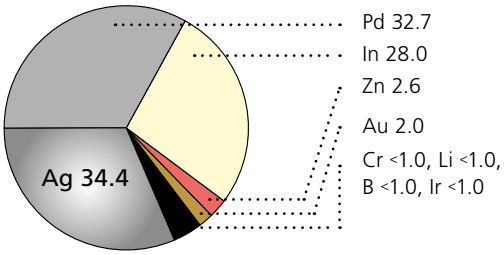
Advantages
- Golden yellow colour
- Economical due to low density
- Brilliant high gloss achieved with ease by polishing
- Veneering with laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges

Technical data

Composition (%):	Ag 34.3 | Pd 32.7 | In 28.0 Zn 2.6 | Au 2.0 | Li <1.0, B <1.0, Cr <1.0, Ir<1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	3 / Yellow
Density (g/cm³):	9.8
Melting Range (Solidus/Liquidus):	875 – 1120 °C
Elastic Modulus (GPa):	80
	As Cast
Vickers Hardness:	175
Tensile Strength (MPa):	540
0.2% Proof Stress (MPa):	300
Elongation (%):	5

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

WLW®

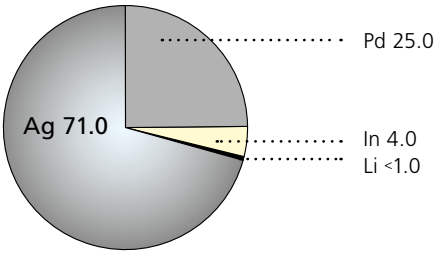
		5 g	25 g	31 g
Crown and bridge alloys	Containing Pd/Ag	**582878**	**582880**	**582881**

WLW® is a silver and palladium-based casting alloy. It is ideally suited for the fabrication of single-tooth restorations and short bridges.

Advantages
- Brilliant high gloss achieved with ease by polishing
- Decades of clinical use
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges

Composition in %



Technical data

Composition (%):	Ag 71.0 | Pd 25.0 | In 4.0 | Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	3 / White
Density (g/cm³):	10.6
Melting Range (Solidus/Liquidus):	1075 – 1130 °C
Elastic Modulus (GPa):	90
	As Cast
Vickers Hardness:	150
Tensile Strength (MPa):	500
0.2% Proof Stress (MPa):	320
Elongation (%):	10

Elektra®

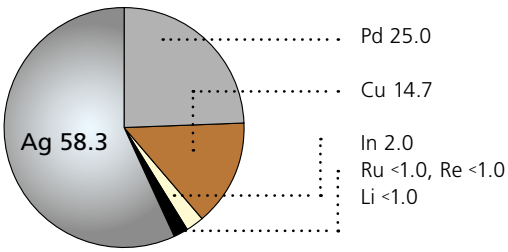
		5 g	25 g	31 g
Crown and bridge alloys	Containing Pd/Ag	**582884**	**582886**	**582887**

Elektra® is a silver and palladium-based casting alloy. Its high strength and low density allow a wide range of indications and economical processing.

Advantages
- High strength
- Economical due to low density
- Excellent processing properties
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Composition in %



Technical data

Composition (%):	Ag 58.3 | Pd 25.0 | Cu 14.7
	In 2.0 | Ru <1.0, Re <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.4
Melting Range (Solidus/Liquidus):	900 – 990 °C
Elastic Modulus (GPa):	105
	As Cast
Vickers Hardness:	190
Tensile Strength (MPa):	560
0.2% Proof Stress (MPa):	475
Elongation (%):	18

BioUniversal PKF

		5 g	25 g	31 g
Universal alloys	High gold content	**579874**	**577350**	**579876**

BioUniversal® PKF is a high gold universal alloy. Its palladium and copper-free composition allows for a wide range of indications for both fixed and removable dental restorations.

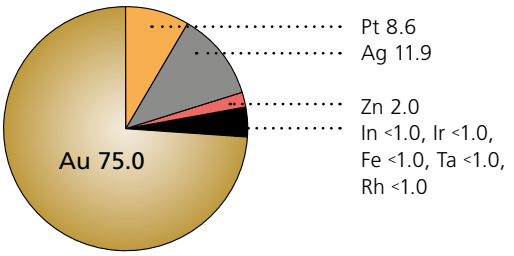
Advantages
- Pd and Cu-free
- Golden yellow colour
- Compatible with special ceramics and laboratory composites
- Wide range of indications
- Certified biocompatibility

Indication*
- Onlays, 3/4 crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Au 75.0 | Ag 11.9 | Pt 8.6 | Zn 2.0 In <1.0, Ir <1.0, Fe <1.0, Ta <1.0, Rh <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	16.8
Melting Range (Solidus/Liquidus):	930 – 1010 °C
Elastic Modulus (GPa):	100
	As Cast
Vickers Hardness:	165
Tensile Strength (MPa):	470
0.2% Proof Stress (MPa):	365
Elongation (%):	10

Composition in %



BioUniversal KFG+

		5 g	25 g	31 g
Universal alloys	Reduced gold content	**681846**	**681844**	**681842**

BioUniversal® KFG+ is a reduced-gold universal alloy for the economical production of restorations using the milling and double crown techniques. This alloy is suitable for veneering with low-fusing special ceramics and laboratory composites.

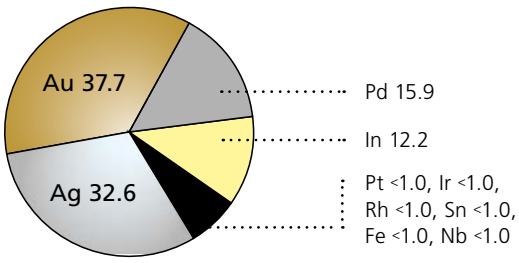
Advantages
- Economical use due to low density
- Cu-free
- Excellent milling characteristics, especially for the double crown technique
- Compatible with low-fusing special ceramics and laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 37.7 | Pd 15.9 | Ag 32.6 | In 12.2 Pt <1.0, Ir <1.0, Rh <1.0, Sn <1.0, Li <1.0, Fe <1.0, Nb <1.0
ISO:	22674:2016
ADA Class	Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	12.2
Melting Range (Solidus/Liquidus):	920 – 995 °C
Elastic Modulus (GPa):	95
	As Cast
Vickers Hardness:	230
Tensile Strength (MPa):	600
0.2% Proof Stress (MPa):	470
Elongation (%):	5

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

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

BioUniversal E

		5 g	25 g	31 g
Universal alloys	Containing Pd/Ag	**592529**	**592531**	**592532**

BioUniversal® E is a copper-free, universal alloy, which can be used for a wide range of indications. Due to its low density, this alloy is suitable for the production of economical restorations and can be veneered with low-fusing special ceramics.

Advantages

- Economical use due to low density
- Easy processing and polishing
- Good melting and flow properties
- Compatible with various special ceramics and composite veneering materials
- Certified biocompatibility

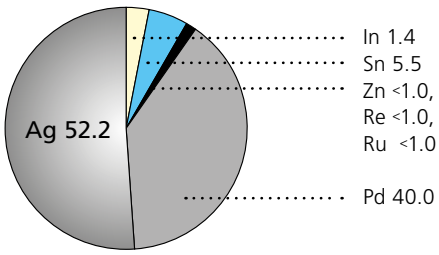
Indication*

- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Ag 52.2 | Pd 40.0 | Sn 5.5 | In 1.4 Zn <1.0, Re <1.0, Ru <1.0
ISO:	22674:2016
ADA Class	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.9
Melting Range (Solidus/Liquidus):	1100 – 1180 °C
Elastic Modulus (GPa):	127
	As Cast
Vickers Hardness:	200
Tensile Strength (MPa):	600
0.2% Proof Stress (MPa):	395
Elongation (%):	10

Composition in %



Callisto® Implant 78

	5 g	25 g	31 g
Implant alloys	**601936**	**601948**	**601949**

Callisto® Implant 78 is a high gold ceramic alloy. The excellent casting properties and the even grain size distribution allow accurately fitting casting objects to be produced, especially for implant-supported superstructures.

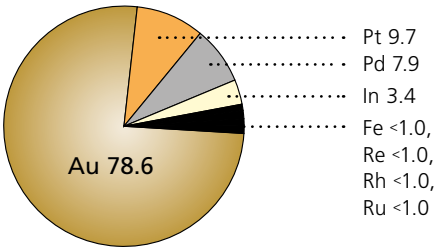
Advantages
- Ag and Cu-free
- Very high strength
- Excellent casting and flow properties
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Even distribution of grain sizes (16–25 µm)

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 78.6 | Pt 9.7 | Pd 7.9 | In 3.4 Fe <1.0, Re <1.0, Rh <1.0, Ru <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	17.6
Melting Range (Solidus/Liquidus):	1130 – 1250 °C
Elastic Modulus (GPa):	120
	Porcelain Fired
Vickers Hardness:	240
Tensile Strength (MPa):	670
0.2% Proof Stress (MPa):	600
Elongation (%):	10

Composition in %



Callisto® Implant 60

	5 g	25 g	31 g
Implant alloys	**601963**	**601960**	**601964**

Callisto® Implant 60 is a palladium-based ceramic alloy. The high strength and the low density make this alloy economical to use, especially for implant-supported superstructures.

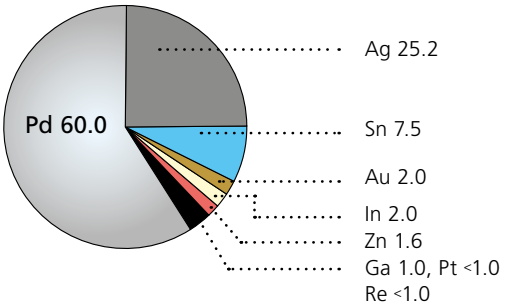
Advantages
- High strength
- Economical due to low density
- High corrosion resistance
- Excellent milling properties
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Low melting range

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 60.0 | Ag 25.2 | Sn 7.5 Au 2.0 | In 2.0 | Zn 1.6 | Ga 1.0 | Pt <1.0, Re <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	1150 – 1260 °C
Elastic Modulus (GPa):	140
	Porcelain fired
Vickers Hardness:	275
Tensile Strength (MPa):	820
0.2% Proof Stress (MPa):	590
Elongation (%):	18

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Brite Gold®

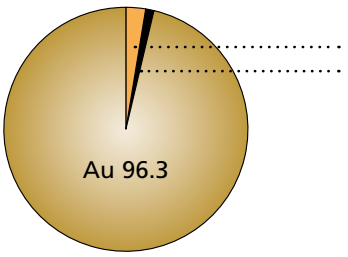
		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**579884**	**576590**	**579886**

Brite Gold® is a high gold ceramic alloy for single-tooth restorations. The warm golden colour gives a natural, esthetic shade effect in the veneer and the alloy has the required hardness for easy polishing.

Advantages
- Pd-free
- Intensive golden colour
- Good melting and flow properties
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns

Composition in %



Pt 2.6
In <1.0, Sn <1.0,
Fe <1.0,
Mn <1.0,
Ir <1.0, B <1.0,
Cu <1.0

Technical data

Composition (%):	Au 96.3 | Pt 2.6 | In <1.0, Sn <1.0, Fe <1.0, Mn <1.0, Ir <1.0, B <1.0, Cu <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	2 / Rich Yellow
Density (g/cm³):	19.0
Melting Range (Solidus/Liquidus):	1025 – 1070 °C
Elastic Modulus (GPa):	79
	As Cast
Vickers Hardness:	90
Tensile Strength (MPa):	250
0.2% Proof Stress (MPa):	180
Elongation (%):	18

Brite Gold® XH

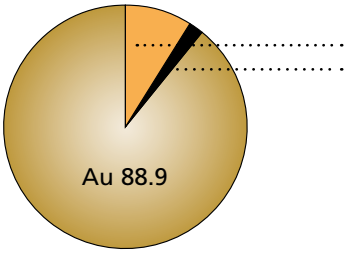
		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**591345**	**591347**	**591348**

Brite Gold® XH is a high gold, palladium-free ceramic alloy with a rich golden yellow colour for a natural and esthetic shade effect in the veneer.

Advantages
- Pd, Ag and Zn-free
- No pickling step required after oxidation
- Rich golden yellow colour
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Composition in %



Pt 9.0
In <1.0,
Sn <1.0,
Fe <1.0,
Mn <1.0,
Ir <1.0,
Li <1.0

Technical data

Composition (%):	Au 88.9 | Pt 9.0 | In <1.0, Sn <1.0 Ir <1.0, Fe <1.0, Mn <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Rich Yellow
Density (g/cm³):	18.8
Melting Range (Solidus/Liquidus):	1050 – 1150 °C
Elastic Modulus (GPa):	105
	Porcelain Fired
Vickers Hardness:	175
Tensile Strength (MPa):	500
0.2% Proof Stress (MPa):	380
Elongation (%):	10

Golden Ceramic®

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**582896**	**582898**	**582899**

Golden Ceramic® is a high gold ceramic alloy. The golden colour enhances the natural shade effect of the veneer in single-tooth and bridge restorations.

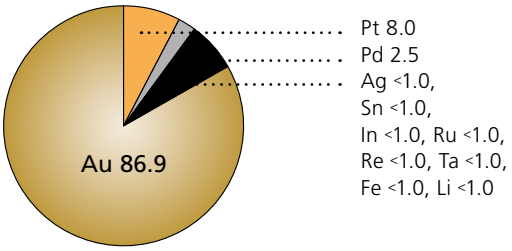
Advantages
- Golden yellow colour
- Light oxide
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Clinically proven
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges

Technical data

Composition (%):	Au 86.9 | Pt 8.0 | Pd 2.5 Ag <1.0, In <1.0, Sn <1.0, Ru <1.0, Re <1.0, Ta <1.0, Fe <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	3 / Rich Yellow
Density (g/cm³):	18.4
Melting Range (Solidus/Liquidus):	1060 – 1140 °C
Elastic Modulus (GPa):	108
	Porcelain Fired
Vickers Hardness:	165
Tensile Strength (MPa):	470
0.2% Proof Stress (MPa):	340
Elongation (%):	12

Composition in %



Aquarius Hard

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**579778**	**576617**	**579780**

Aquarius Hard is a high gold ceramic alloy. The golden yellow colour and the light oxide enhance the natural shade reproduction in the veneer.

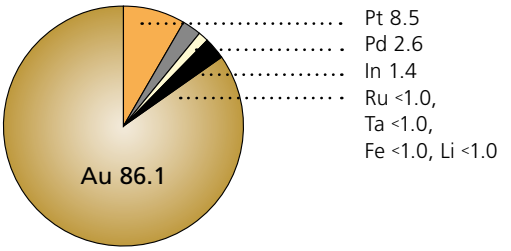
Advantages
- Golden yellow colour
- Wide range of indications
- Light oxide
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Au 86.1 | Pt 8.5 | Pd 2.6 | In 1.4 Ru <1.0, Li <1.0, Fe <1.0, Ta <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	18.5
Melting Range (Solidus/Liquidus):	1045 – 1145 °C
Elastic Modulus (GPa):	110
	Porcelain Fired
Vickers Hardness:	160
Tensile Strength (MPa):	470
0.2% Proof Stress (MPa):	370
Elongation (%):	10

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

d.SIGN® 98

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**580318**	**576611**	**580320**

d.SIGN® 98 is a high gold, palladium-free ceramic alloy. The mechanical properties allow for a wide range of indications and the golden yellow colour enhances the natural shade reproduction in the veneer.

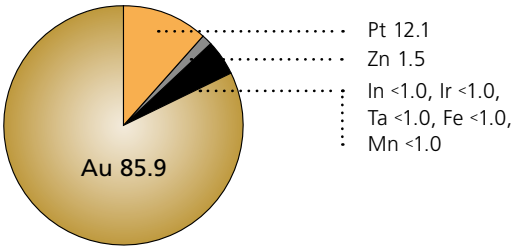
Advantages
- Pd-free
- Golden yellow colour
- Light oxide
- Compatible with conventional metal-ceramics (e. g. IPS Style®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 85.9 | Pt 12.1 | Zn 1.5 In <1.0,Ir <1.0, Fe <1.0, Mn <1.0, Ta <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Rich Yellow
Density (g/cm³):	18.9
Melting Range (Solidus/Liquidus):	1055 – 1150 °C
Elastic Modulus (GPa):	110
	Porcelain Fired
Vickers Hardness:	220
Tensile Strength (MPa):	585
0.2% Proof Stress (MPa):	510
Elongation (%):	6

Composition in %



Aquarius XH

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**579797**	**576615**	**579799**

Aquarius XH is a high gold ceramic alloy. The mechanical properties allow a wide range of indications and the golden yellow colour enhances the natural shade reproduction in the veneer.

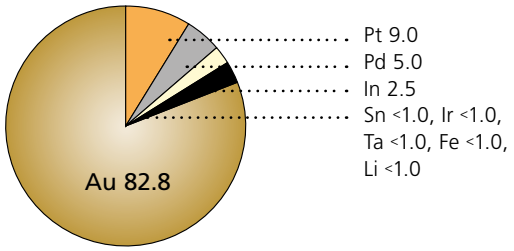
Advantages
- Ag-free
- Esthetic, golden yellow colour
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 82.8 | Pt 9.0 | Pd 5.0 | In 2.5 Sn <1.0, Ir <1.0, Fe <1.0, Ta <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Rich Yellow
Density (g/cm³):	17.9
Melting Range (Solidus/Liquidus):	1050 – 1185 °C
Elastic Modulus (GPa):	115
	Porcelain Fired
Vickers Hardness:	220
Tensile Strength (MPa):	560
0.2% Proof Stress (MPa):	500
Elongation (%):	10

Composition in %



Sagittarius

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**582050**	**576626**	**582052**

Sagittarius is a classical, high gold ceramic alloy compatible with conventional metal ceramics. The high strength allows a wide range of indications.

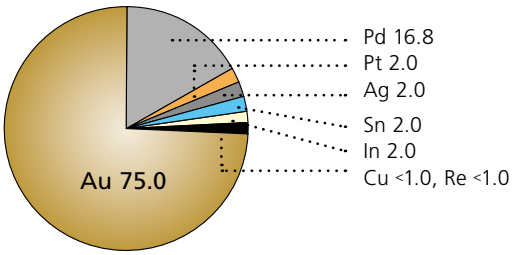
Advantages
- Clinically proven
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 75.0 | Pd 16.8 Pt 2.0 | Ag 2.0| Sn 2.0 | In 2.0 | Cu <1.0, Re <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	16.4
Melting Range (Solidus/Liquidus):	1130 – 1255 °C
Elastic Modulus (GPa):	135
	Porcelain Fired
Vickers Hardness:	245
Tensile Strength (MPa):	690
0.2% Proof Stress (MPa):	580
Elongation (%):	10

Composition in %



d.SIGN® 96

		5 g	25 g	31 g
Ceramic bonded alloys	High gold content	**580313**	**576609**	**580315**

d.SIGN® 96 is a high gold ceramic alloy. The mechanical properties and the high heat resistance make this alloy suitable for a wide range of indications.

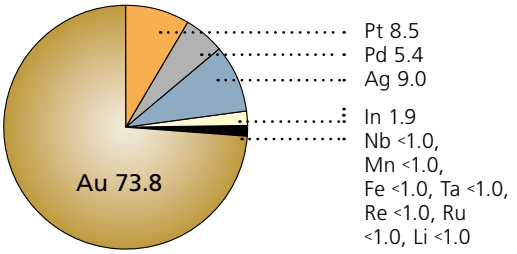
Advantages
- Golden yellow colour
- Lighter oxide
- Higher heat resistance
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Partial dentures

Technical data

Composition (%):	Au 73.8 | Ag 9.0 | Pt 8.5 Pd 5.4 | In 1.9 | Nb <1.0, Mn <1.0, Fe <1.0, Ta <1.0, Re <1.0, Ru 1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / Yellow
Density (g/cm³):	16.7
Melting Range (Solidus/Liquidus):	1050 – 1160 °C
Elastic Modulus (GPa):	125
	Porcelain Fired
Vickers Hardness:	225
Tensile Strength (MPa):	600
0.2% Proof Stress (MPa):	450
Elongation (%):	10

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

d.SIGN® 91

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**579937**	**576608**	**579939**

d.SIGN® 91 is an extra hard, reduced-gold ceramic alloy, suitable for use with conventional metal-ceramics. The mechanical properties make it suitable for a wide range of indications.

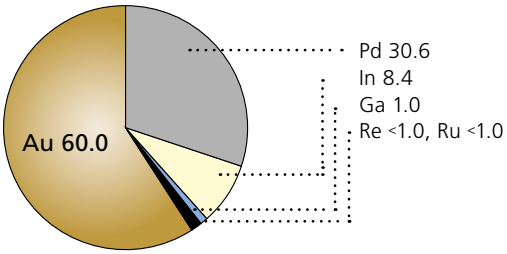
Advantages
- Ag-free
- Extra hard
- Excellent casting and flow properties
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 60.0 | Pd 30.6 | In 8.4 Ga 1.0 | Re <1.0, Ru <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	5 / White
Density (g/cm³):	14.3
Melting Range (Solidus/Liquidus):	1125 – 1265 °C
Elastic Modulus (GPa):	152
	Porcelain Fired
Vickers Hardness:	250
Tensile Strength (MPa):	720
0.2% Proof Stress (MPa):	530
Elongation (%):	14

Composition in %



W

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**582111**	**576635**	**582113**

W is a reduced-gold ceramic alloy, suitable for conventional metal-ceramics. The good flow characteristics during casting and the high strength allow for a wide range of indications.

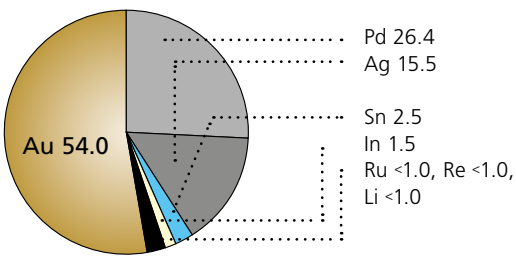
Advantages
- Good casting and flow characteristics
- High strength
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Partial dentures

Technical data

Composition (%):	Au 54.0 | Pd 26.4 | Ag 15.5 Sn 2.5 | In 1.5 | Re <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	13.8
Melting Range (Solidus/Liquidus):	1200 – 1280 °C
Elastic Modulus (GPa):	118
	Porcelain Fired
Vickers Hardness:	220
Tensile Strength (MPa):	660
0.2% Proof Stress (MPa):	455
Elongation (%):	20

Composition in %



W-5

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**582944**	**582947**	**582948**

W-5 is a classical, reduced-gold ceramic alloy. The good casting characteristics and the high heat resistance allow for the production ceramic veneered to metal frameworks and implant-supported superstructures of high accuracy.

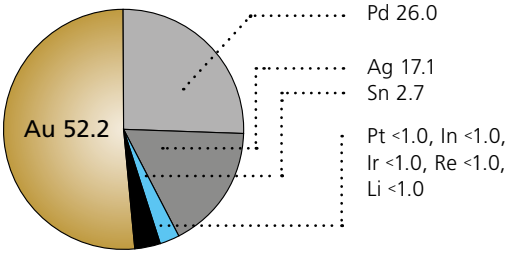
Advantages
- Light oxide
- Good melting and flow characteristics
- High heat resistance
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 52.2 | Pd 26.0 | Ag 17.1 Sn 2.7 | Pt <1.0, In <1.0, Ir <1.0, Re <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	13.8
Melting Range (Solidus/Liquidus):	1185 – 1285 °C
Elastic Modulus (GPa):	130
	Porcelain Fired
Vickers Hardness:	215
Tensile Strength (MPa):	715
0.2% Proof Stress (MPa):	475
Elongation (%):	15

Composition in %



Lodestar®

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**582040**	**576633**	**582042**

Lodestar® is a classical, reduced-gold ceramic alloy with a high degree of strength for a wide range of indications. The silver-free composition enables reliable processing with conventional metal-ceramics.

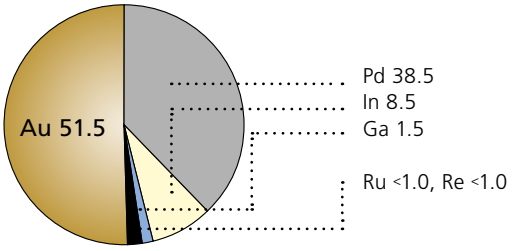
Advantages
- Ag-free
- Good melting and flow characteristics
- Increased strength
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 51.5 | Pd 38.5 | In 8.5 | Ga 1.5 Re <1.0, Ru <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	13.7
Melting Range (Solidus/Liquidus):	1175 – 1300 °C
Elastic Modulus (GPa):	125
	Porcelain Fire
Vickers Hardness:	240
Tensile Strength (MPa):	705
0.2% Proof Stress (MPa):	495
Elongation (%):	20

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Leo

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**582963**	**582965**	**582966**

Leo is a reduced-gold ceramic alloy, suitable for conventional metal-ceramics. The good flow properties during casting and the high heat resistance allow for a wide range of indications.

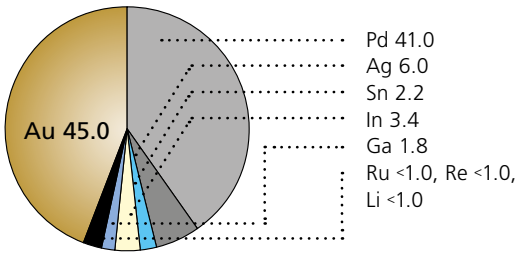
Advantages
- Good casting and flow characteristics
- High heat resistance
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts /cores, bars, attachments
- Partial dentures

Technical data

Composition (%):	Au 45.0 | Pd 41.0 | Ag 6.0 Sn 2.2 | In 3.4 | Ga 1.8 Re <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class	High Noble
Type / Colour:	4 / White
Density (g/cm³):	13.5
Melting Range (Solidus/Liquidus):	1225 – 1315 °C
Elastic Modulus (GPa):	140
	Porcelain Fire
Vickers Hardness:	190
Tensile Strength (MPa):	670
0.2% Proof Stress (MPa):	450
Elongation (%):	20

Composition in %



Evolution Lite

		5 g	25 g	31 g
Ceramic bonded alloys	Reduced gold content	**583651**	**583653**	**583654**

Evolution® Lite is a reduced-gold ceramic alloy, suitable for conventional metal-ceramics. The higher strength imparts this alloy with a high marginal strength, in particular during multiple firing, and allows accurately fitting restorations to be produced.

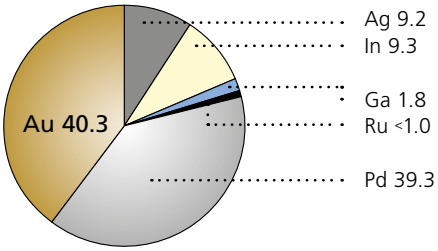
Advantages
- Light oxide
- Good melting and flow properties
- High resistance to marginal deformation with multiple firings
- Compatible with metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Au 40.3 | Pd 39.3 | Ag 9.2 In 9.3 | Ga 1.8 | Ru <1.0
ISO:	22674:2016
ADA Class:	High Noble
Type / Colour:	4 / White
Density (g/cm³):	12.8
Melting Range (Solidus/Liquidus):	1100 – 1260 °C
Elastic Modulus (GPa):	130
	Porcelain Fired
Vickers Hardness:	280
Tensile Strength (MPa):	790
0.2% Proof Stress (MPa):	565
Elongation (%):	12

Composition in %



Spartan® Plus

Ceramic bonded alloys	Containing Pd/Ag	5 g	25 g	31 g
		582975	**582977**	**582978**

Spartan® Plus is a classical, silver-free, palladium-based ceramic alloy. The silver-free composition enables reliable processing with conventional metal-ceramics.

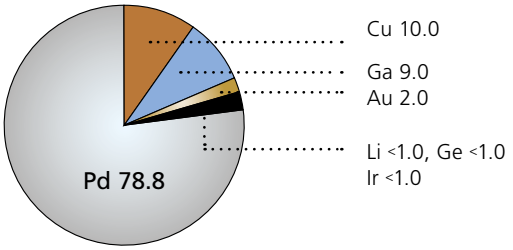
Advantages
- Ag-free
- High heat resistance
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Wide range of indications
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 78.8 | Cu 10.0 | Au 2.0 | Ga 9.0 Li <1.0, Ge <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.0
Melting Range (Solidus/Liquidus):	1130 – 1210 °C
Elastic Modulus (GPa):	140
	Porcelain Fired
Vickers Hardness:	310
Tensile Strength (MPa):	900
0.2% Proof Stress (MPa):	740
Elongation (%):	10

Composition in %



Spartan®

Ceramic bonded alloys	Containing Pd/Ag	5 g	25 g	31 g
		582969	**582971**	**582972**

Spartan® is a silver-free, palladium-based ceramic alloy. Its mechanical properties and high heat resistance allow a wide range of indications.

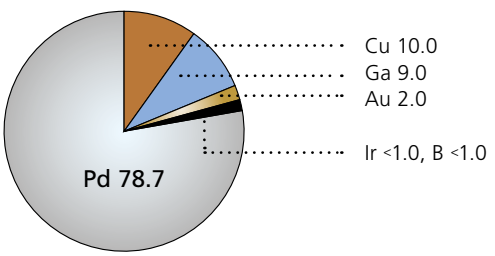
Advantages
- Ag-free
- High heat resistance
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 78.7 | Cu 10.0 | Au 2.0 Ga 9.0 | B <1.0, Ir <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	5 / White
Density (g/cm³):	10.9
Melting Range (Solidus/Liquidus):	1050 – 1190 °C
Elastic Modulus (GPa):	155
	Porcelain Fired
Vickers Hardness:	310
Tensile Strength (MPa):	1165
0.2% Proof Stress (MPa):	945
Elongation (%):	18

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Capricorn

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579896**	**576613**	**579898**

Capricorn is a classical, palladium-based ceramic alloy. The good flow properties during casting and excellent heat resistance allow a wide range of indications, especially for long restorations.

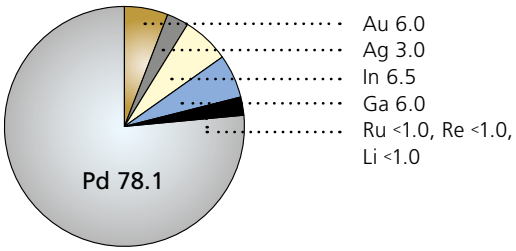
Advantages
- Excellent casting and flow properties
- High heat resistance
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 78.1 | Ag 3.0 | Au 6.0 | In 6.5 Ga 6.0 | Ru <1.0, Re <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.2
Melting Range (Solidus/Liquidus):	1155 – 1335 °C
Elastic Modulus (GPa):	125
	Porcelain Fired
Vickers Hardness:	255
Tensile Strength (MPa):	820
0.2% Proof Stress (MPa):	525
Elongation (%):	25

Composition in %



d.SIGN® 84

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579921**	**576597**	**579933**

d.SIGN® 84 is a palladium-based ceramic alloy. Its excellent melting and flow properties together with easy polishing properties ensure straightforward processing.

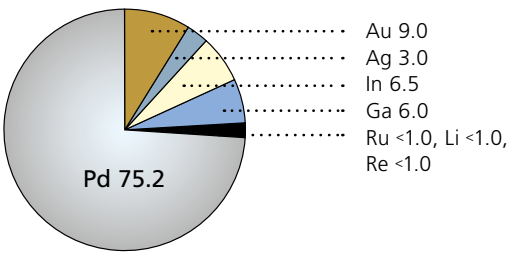
Advantages
- Excellent heat resistance
- Excellent melting and flow properties
- Easy processing and polishing
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 75.2 | Ag 3.0 | Au 9.0 In 6.5 | Ga 6.0 | Ru <1.0, Re <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.3
Melting Range (Solidus/Liquidus):	1140 – 1335 °C
Elastic Modulus (GPa):	145
	Porcelain Fired
Vickers Hardness:	270
Tensile Strength (MPa):	825
0.2% Proof Stress (MPa):	495
Elongation (%):	25

Composition in %



Protocol

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**582987**	**582989**	**582990**

Protocol® is a palladium-based ceramic alloy, compatible with conventional metal-ceramics. Its mechanical properties and good flow properties allow accurately fitting casting objects to be produced.

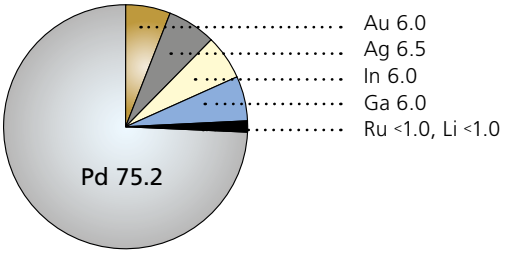
Advantages
- Excellent melting and flow properties
- Easy processing and polishing
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 75.2 | Au 6.0 | Ag 6.5 In 6.0 | Ga 6.0 | Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.3
Melting Range (Solidus/Liquidus):	1270 – 1310 °C
Elastic Modulus (GPa):	134
	Porcelain Fired
Vickers Hardness:	235
Tensile Strength (MPa):	745
0.2% Proof Stress (MPa):	500
Elongation (%):	30

Composition in %



Callisto® 75 Pd

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**635188**	**632926**	**632911**

Callisto® 75 Pd is an economical palladium-based ceramic alloy. The high strength allows accurately fitting implant-supported superstructures to be produced; the low hardness makes it easy to process up to polishing.

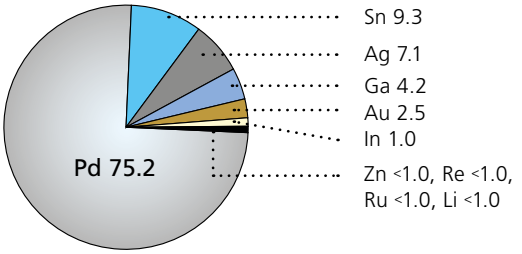
Advantages
- Wide range of indications
- High strength
- Excellent melting and casting properties for an even metal structure
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Excellent processing and polishing properties

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 75.2 | Ag 7.1 | Au 2.5 | Sn 9.3 Ga 4.2 | In 1.0 | Zn <1.0, Re <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	1110-1295°C
Elastic Modulus (GPa):	136
	Porcelain Fired
Vickers Hardness:	230
Tensile Strength (MPa):	810
0.2% Proof Stress (MPa):	500
Elongation (%):	35

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Aries

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579802**	**576614**	**579804**

Aries is a palladium-based ceramic alloy, compatible with conventional metal ceramics. The mechanical properties and the easy processing make this alloy suitable for a wide range of indications.

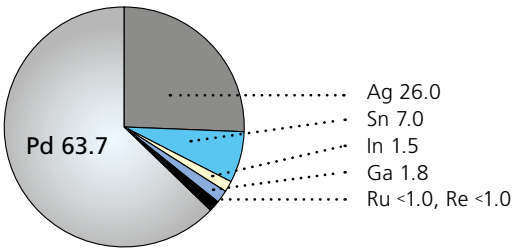
Advantages
- Excellent processing and polishing properties
- Decades of successful use
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Pd 63.7 | Ag 26.0 | Sn 7.0 | Ga 1.8 In 1.5 | Ru <1.0, Re <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	1165 – 1290 °C
Elastic Modulus (GPa):	130
	Porcelain Fired
Vickers Hardness:	180
Tensile Strength (MPa):	680
0.2% Proof Stress (MPa):	400
Elongation (%):	35

Composition in %



d.SIGN® 67

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579914**	**576596**	**579916**

d.SIGN® 67 is a palladium-based ceramic alloy. The high heat resistance and the excellent melting and flow properties enable easy processing up to polishing.

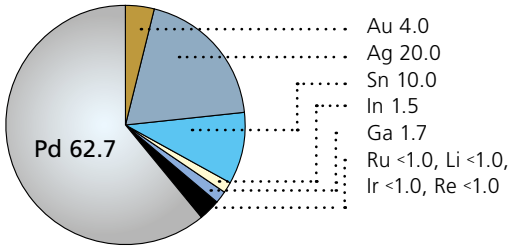
Advantages
- Good melting and flow properties
- Easy processing and polishing
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 62.7 | Ag 20.0 | Au 4.0 | Sn 10.0 In 1.5 | Ga 1.7 | Ru <1.0, Re <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	1150 – 1270 °C
Elastic Modulus (GPa):	135
	Porcelain Fired
Vickers Hardness:	245
Tensile Strength (MPa):	785
0.2% Proof Stress (MPa):	545
Elongation (%):	12

Composition in %



d.SIGN® 59

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579908**	**576595**	**579910**

d.SIGN® 59 is a palladium-based ceramic alloy. Its low density together with excellent heat resistance enable easy and economical processing and polishing.

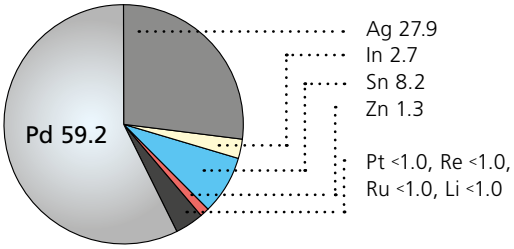
Advantages
- Excellent heat resistance
- Economical due to low density
- Light oxide
- Excellent processing and polishing properties
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 59.2 | Ag 27.9 | Sn 8.2 In 2.7 | Zn 1.3 | Pt <1.0, Re <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.9
Melting Range (Solidus/Liquidus):	1190 – 1290 °C
Elastic Modulus (GPa):	134
	Porcelain Fired
Vickers Hardness:	230
Tensile Strength (MPa):	740
0.2% Proof Stress (MPa):	490
Elongation (%):	10

Composition in %



d.SIGN® 53

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579902**	**576594**	**579904**

d.SIGN® 53 is a palladium-based ceramic alloy. Its low density together with excellent flow properties enable easy and economical processing.

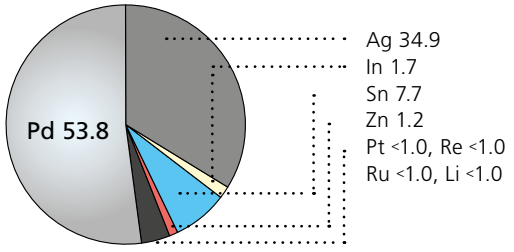
Advantages
- Economical due to low density
- Excellent melting and flow properties
- Light oxide
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 53.8 | Ag 34.9 | Sn 7.7 In 1.7 | Zn 1.2 | Pt <1.0, Re <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	10.8
Melting Range (Solidus/Liquidus):	1180 – 1270 °C
Elastic Modulus (GPa):	132
	Porcelain Fired
Vickers Hardness:	250
Tensile Strength (MPa):	730
0.2% Proof Stress (MPa):	545
Elongation (%):	10

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

W-1

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**582981**	**582983**	**582984**

W-1 is a classical, palladium-based ceramic alloy, compatible with conventional metal-ceramics. Its mechanical properties and easy processing allow a wide range of indications.

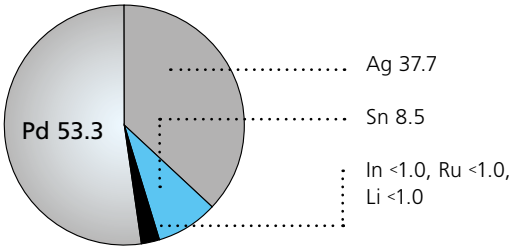
Advantages
- Easy processing and polishing
- Decades of successful use
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Partial dentures

Technical data

Composition (%):	Pd 53.3 | Ag 37.7 | Sn 8.5 In <1.0, Ru <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.1
Melting Range (Solidus/Liquidus):	1185 – 1270 °C
Elastic Modulus (GPa):	120
	Porcelain Fired
Vickers Hardness:	225
Tensile Strength (MPa):	650
0.2% Proof Stress (MPa):	450
Elongation (%):	11

Composition in %



Capricorn 15

		5 g	25 g	31 g
Ceramic bonded alloys	Containing Pd/Ag	**579890**	**577349**	**579892**

Capricorn 15 is a palladium-based ceramic alloy. The increased gold content enables good flow properties and therefore easy and economical processing with fast polishing.

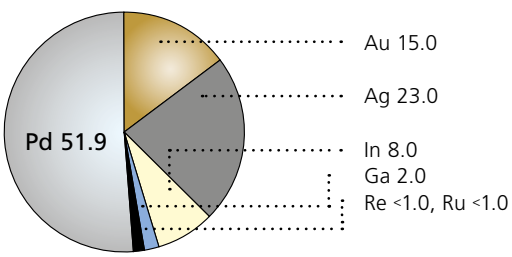
Advantages
- Good casting and flow properties
- Excellent processing and polishing properties
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®)
- Certified biocompatibility

Indication*
- Inlays
- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Pd 51.9 | Au 15.0 | Ag 23.0 In 8.0 | Ga 2.0 | Re <1.0, Ru <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	4 / White
Density (g/cm³):	11.5
Melting Range (Solidus/Liquidus):	1140 – 1290 °C
Elastic Modulus (GPa):	120
	Porcelain Fired
Vickers Hardness:	250
Tensile Strength (MPa):	745
0.2% Proof Stress (MPa):	490
Elongation (%):	18

Composition in %



Callisto® CPG

Ceramic bonded alloys	Containing Pd/Ag	25 g	31 g
		646547	**646546**

Callisto® CPG is cobalt-chromium-base ceramic alloy with palladium content. The low density makes this alloy especially economical and the fixed price keeps the costs consistent.

Advantages

- Economical due to low density
- Calculable due to fixed price
- Wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®) and laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

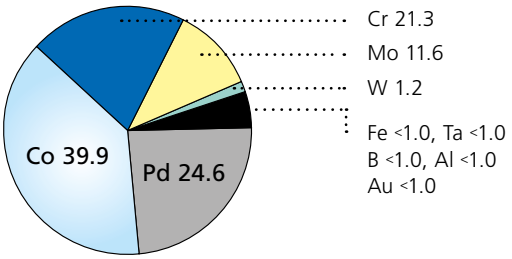
Indication*

- Onlays, ¾ crowns, crowns
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Co 39.9 | Cr 21.3 | Pd 24.6 Mo 11.6 | W 1.2 Fe <1.0, Ta <1.0, B <1.0, Au <1.0, Al <1.0
ISO:	22674:2016
ADA Class:	Noble
Type / Colour:	5 / White
Density (g/cm³):	9.3
Melting Range (Solidus/Liquidus):	1185 – 1275 °C
Elastic Modulus (GPa):	230
	As Cast
Vickers Hardness:	335
Tensile Strength (MPa):	820
0.2% Proof Stress (MPa):	600
Elongation (%):	10

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

d.SIGN® 30

		25 g	31 g	150 g	155 g	250 g
Predominantly base alloys	CoCr based	**575209**	**578826**	**575207**	**578825**	**575208**

d.SIGN® 30 is a cobalt-chromium ceramic alloy. The excellent melting and flow properties enable easy divesting and allow accurately fitting restorations to be made.

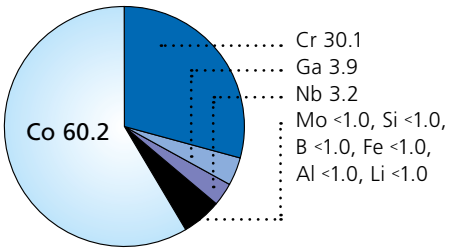
Advantages
- Excellent melting and flow properties
- Easy do divest
- Light oxide
- Compatible with conventional metal-ceramics (e.g. IPS Style®) and laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Co 60.2 | Cr 30.1 | Ga 3.9 | Nb 3.2 Mo <1.0, Si <1.0, B <1.0, Fe <1.0, Al <1.0, Li <1.0
ISO:	22674:2016
ADA Class:	Base Metal
Type / Colour:	5 / White
Density (g/cm³):	7.8
Melting Range (Solidus/Liquidus):	1145 – 1180 °C
Elastic Modulus (GPa):	234
	Porcelain Fired
Vickers Hardness:	385
Tensile Strength (MPa):	660
0.2% Proof Stress (MPa):	510
Elongation (%):	5

Composition in %



Colado® CC

		25 g	31 g	250 g	1000 g
Predominantly base alloys	CoCr based	**627530AN**	**627533AN**	**627532AN**	**627531AN**

Colado® CC is a base metal, cobalt-chromium alloy and an economical alternative to precious metal alloys. The homogeneous metal structure allows a durable ceramic and composite bond, in particular on implant-supported superstructures.

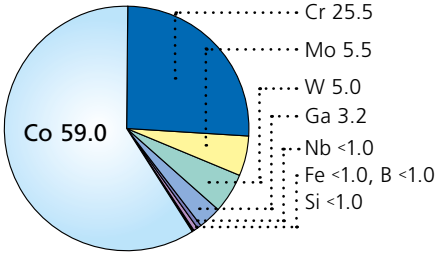
Advantages
- Excellent melting and casting properties
- Easy processing and polishing
- Suitable for a wide range of indications
- Compatible with conventional metal-ceramics (e.g. IPS Style®) and laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments
- Implant-supported superstructures
- Partial dentures

Technical data

Composition (%):	Co 59.0 | Cr 25.5 | Mo 5.5 | W 5.0 Ga 3.2 | Nb <1.0, Fe <1.0, B <1.0, Si <1.0
ISO:	22674:2016
ADA Class:	Base Metal
Type / Colour:	5 / White
Density (g/cm³):	8.5
Melting Range (Solidus/Liquidus):	1175 – 1385 °C
Elastic Modulus (GPa):	198
	Porcelain Fired
Vickers Hardness:	360
Tensile Strength (MPa):	620
0.2% Proof Stress (MPa):	500
Elongation (%):	9

Composition in %



4all		250 g	1000 g
Predominantly base alloys	NiCr based	**578891AN**	**578942AN**

4all® is a nickel-chromium ceramic alloy. The reduced hardness makes it easy to process and the excellent melting and flow properties enable accurately fitting restorations.

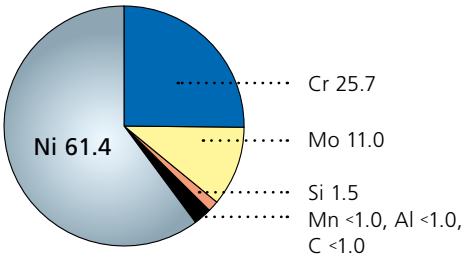
Advantages
- Reduced hardness
- Easy to divest
- Excellent melting and flow properties
- Compatible with conventional metal-ceramics (e.g. IPS Style® and laboratory composites (e.g. SR Nexco®)
- Certified biocompatibility

Indication*
- Telescope crowns, conus crowns
- Bridges
- Wide bridges
- Cast posts / cores, bars, attachments

Technical data

Composition (%):	Ni 61.4 | Cr 25.7 | Mo 11.0 Si 1.5 | Mn <1.0, Al <1.0, C <1.0
ISO:	22674:2016
ADA Class:	Base Metal
Type / Colour:	4 / White
Density (g/cm³):	8.4
Melting Range (Solidus/Liquidus):	1260 – 1350 °C
Elastic Modulus (GPa):	200
	Porcelain Fired
Vickers Hardness:	235
Tensile Strength (MPa):	720
0.2% Proof Stress (MPa):	375
Elongation (%):	12

Composition in %



* See TYPE CLASSIFICATION DUE TO PHYSICAL PROPERTIES

Additional Information

Alloy Overview

	Au	Pt	Pd	Ag	Proof stress (0.2%)	Modulus of elasticity	Cast on / Cast to	Composite Compatibility: SR Nexco / SR Link
Crown and bridge alloys								
High gold content								
Harmony® PF	72.0	3.6	–	13.7	525	135	✓	✓
Reduced gold content								
XL-X®	62.8	–	3.9	16.1	690	105	✓	✓
Maxigold®	59.5	–	2.7	26.3	525	130	✓	✓
Midigold® 50	50.0	–	3.5	35.0	490	95	✓	✓
Containing Pd/Ag								
Elektra®	–	–	25.0	58.3	475	105	✓	–
Universal alloys								
Reduced gold content								
BioUniversal KFG+	37.7	<1.0	15.9	32.6	430	95	✓	✓

	Au	Pt	Pd	Ag	Proof stress (0.2%)	Modulus of elasticity	Cast on / Cast to	Ceramic Compatibility: IPS Style	IPS InLine One / IPS InLine	IPS InLine PoM	IPS Classic	IPS d.SIGN
Implant alloys												
Callisto® Implant 78	78.6	9.7	7.9	–	600	120	✓	✓	✓	✓	✓	✓
Callisto® Implant 60	2.0	<1.0	60.0	25.2	590	140	✓	✓	✓	–	✓	✓
Ceramic bonded alloys												
High gold content												
d.SIGN® 98	85.9	12.1	–	–	510	110	✓	✓	✓	✓	✓	✓
Aquarius XH	82.8	9.0	5.0	–	500	115	✓	✓	✓	✓	✓	✓
Sagittarius	75.0	2.0	16.8	2.0	580	135	✓	✓	✓	✓	✓	✓
Reduced gold content												
d.SIGN® 91	60.0	–	30.6	–	530	152	✓	✓	✓	✓	✓	✓
W-5	52.2	<1.0	26.0	17.1	475	130	✓	✓	✓	–	✓	✓
Lodestar®	51.5	–	38.5	–	495	125	✓	✓	✓	✓	✓	✓
Evolution Lite	40.3	–	39.3	9.2	565	130	✓	✓	✓	–	✓	✓
Containing Pd/Ag												
Spartan® Plus	2.0	–	78.8	–	740	140	✓	✓	✓	–	✓	✓
Spartan®	2.0	–	78.7	–	945	155	✓	✓	✓	–	✓	✓
Capricorn	6.0	–	78.1	3.0	525	125	✓	✓	✓	✓	✓	✓
d.SIGN® 84	9.0	–	75.2	3.0	495	145	✓	✓	✓	✓	✓	✓
Protocol	6.0	–	75.2	6.5	500	134	✓	✓	✓	✓	✓	✓
Callisto® 75 Pd	2.5	–	75.2	7.1	500	136	✓	✓	✓	✓	✓	✓
d.SIGN® 67	4.0	–	62.7	20.0	545	135	✓	✓	✓	–	✓	✓
d.SIGN® 59	–	<1.0	59.2	27.9	490	134	✓	✓	✓	–	✓	✓
d.SIGN® 53	–	<1.0	53.8	34.9	545	132	✓	✓	✓	–	✓	✓
Capricorn 15	15.0	–	51.9	23.0	490	120	✓	✓	✓	–	✓	✓
Callisto® CPG	<1.0	–	24.6	–	665	230	–	✓	✓	✓	✓	✓

	Ni	Co	Cr	Mo	Proof stress (0.2%)	Modulus of elasticity	Cast on / Cast to	IPS Style	IPS InLine One / IPS InLine	IPS InLine PoM	IPS Classic	IPS d.SIGN
Predominantly base alloys												
Cobalt base												
d.SIGN® 30	–	60.2	30.1	<1.0	510	234	–	✓	✓	✓	✓	✓
Colado® CC	–	59.0	25.5	5.5	500	198	–	✓	✓	✓	✓	✓

Veneering Solution

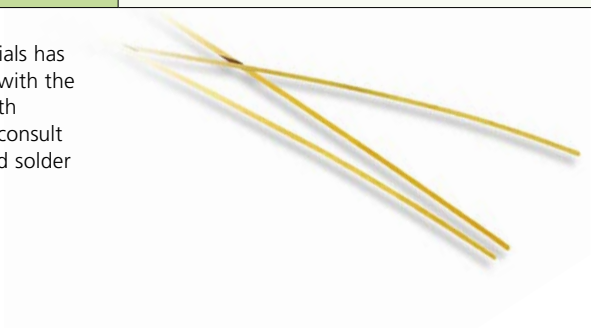
	Ceramic Compatibility					Composite Compatibility
	IPS Style®	IPS InLine® One IPS InLine®	IPS InLine® PoM	IPS Classic®	IPS d.SIGN®	SR Nexco® / SR® Link
Crown and bridge alloys						
High gold content						
Academy Gold	–	–	–	–	–	✓
Harmony® Hard	–	–	–	–	–	–
Harmony® PF	–	–	–	–	–	✓
Reduced gold content						
XL–X®	–	–	–	–	–	✓
X–L®	–	–	–	–	–	–
Maxigold®	–	–	–	–	–	✓
Harmony® C&B 55	–	–	–	–	–	–
Midigold 50®	–	–	–	–	–	–
Minigold®	–	–	–	–	–	✓
Containing Pd/Ag						
Solarcast® 20	–	–	–	–	–	–
Harmony® 3	–	–	–	–	–	✓
Harmony® 2	–	–	–	–	–	✓
WLW®	–	–	–	–	–	–
Elektra®	–	–	–	–	–	–
Universal alloys						
High gold content						
BioUniversal PKF	–	–	–	–	–	–
Reduced gold content						
BioUniversal KFG+	–	–	–	–	–	✓
Containing Pd/Ag						
BioUniversal E	–	–	–	–	–	–
Implant alloys						
Callisto® Implant 78	✓	✓	✓	✓	✓	–
Callisto® Implant 60	✓	✓	–	✓	✓	–
Ceramic bonded alloys						
High gold content						
Brite Gold®	✓	✓	–	✓	✓	–
Brite Gold® XH	✓	✓	–	✓	✓	–
Golden Ceramic®	✓	✓	–	–	✓	–
Aquarius Hard	✓	✓	✓	✓	✓	–
d.SIGN® 98	✓	✓	✓	✓	✓	–
Aquarius XH	✓	✓	✓	✓	✓	–
Sagittarius	✓	✓	✓	✓	✓	–
d.SIGN® 96	✓	✓	✓	✓	✓	–
Reduced gold content						
d.SIGN® 91	✓	✓	✓	✓	✓	–
W	✓	✓	–	✓	✓	–
W–5	✓	✓	–	✓	✓	–
Lodestar®	✓	✓	✓	✓	✓	–
Leo	✓	✓	✓	✓	✓	–
Evolution Lite	✓	✓	–	✓	✓	–
Containing Pd/Ag						
Spartan® Plus	✓	✓	–	✓	✓	–
Spartan®	✓	✓	–	✓	✓	–
Capricorn	✓	✓	✓	✓	✓	–
d.SIGN® 84	✓	✓	✓	✓	✓	–
Protocol	✓	✓	✓	✓	✓	–
Callisto® 75 Pd	✓	✓	–	✓	✓	–
Aries	✓	✓	–	✓	✓	–
d.SIGN® 67	✓	✓	–	✓	✓	–
d.SIGN® 59	✓	✓	–	✓	✓	–
d.SIGN® 53	✓	✓	–	✓	✓	–
W–1	✓	✓	–	✓	–	–
Capricorn 15	✓	✓	–	✓	✓	–
Callisto® CPG	✓	✓	✓	✓	✓	✓
Predominantly base alloys						
Cobalt base						
d.SIGN® 30	✓	✓	✓	✓	✓	✓
Colado® CC	✓	✓	✓	✓	✓	✓
Nickel base						
4all	✓	✓	✓	✓	✓	✓

Consumables

Solders

Pre-Solder, Universal Solder, Post Solder

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.



	Composition												Melting range	Flow Point
Pre-Solder	**Au**	**Pt**	**Pd**	**Ag**	**Cu**	**In**	**Li**	**Mn**	**Ni**	**Ru**	**Zn**	**others**	**°C / °F**	**°C / °F**
High Fusing Yellow Ceramic Solder (HFYC) **NA1190104**	80.0	–	4.2	15.4	–	<1.0	<1.0	–	–	<1.0	–	Fe <1.0	**C°** 1085 – 1115 **F°** 1985 – 2040	**C°** 1100 **F°** 2010
HGPKF 1030 Y (High Gold Palladium Copper free) **593565**	63.2	>1.0	–	35.0	–	–	–	<1.0	–	–	<1.0	Ir <1.0	**C°** 1015 – 1040 **F°** 1860 – 1900	**C°** 1030 **F°** 1885
GPKF 1015 Y (High Gold Palladium Copper free) **579851**	60.0	2.1	–	36.5	–	<1.0	–	–	–	–	<1.0	Ir <1.0 Sn <1.0	**C°** 975 – 1035 **F°** 1785 – 1895	**C°** 1015 **F°** 1860
Spartan Ceramic Solder **NA1190914**	50.0	–	24.0	–	25.0	–	–	–	–	–	<1.0	Ir <1.0	**C°** 1080 – 1105 **F°** 1975 – 2020	**C°** 1065 **F°** 1950
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	**C°** 1045 – 1105 **F°** 1950 – 2020	**C°** 1105 **F°** 2020
High Fusing White Ceramic Solder (HFWC) **NA1190404**	45.0	–	12.4	41.5	–	1.0	<1.0	–	–	<1.0	–	–	**C°** 1100 – 1165 **F°** 2010 – 2130	**C°** 1135 **F°** 2075
Super Solder Ceramic Solder **NA1190804**	–	–	53.5	7.0	–	–	<1.0	–	35.6	–	–	Sn 3.8	**C°** 1085 – 1180 **F°** 1985 – 2155	**C°** 1135 **F°** 2075

FLUX: High Fusing Bondal Flux – Implant Alloys, Ceramic bonded alloys, Predominantly base alloys

	Composition							Melting range	Flow Point
Universal Solder	**Au**	**Pt**	**Pd**	**Ag**	**Zn**	**In**	**others**	**°C / F**	**°C / F**
Universal Solder PKF **573373**	48.8	2.8	–	40.5	7.3	<1.0	Ir <1.0	**C°** 800 – 900 **F°** 1470 – 1650	**C°** 850 **F°** 1560
Universal Solder 1015 W **595611**	18.5	–	6.0	72.5		3.0	Ir <1.0	**C°** 985 – 1025 **F°** 1805 – 1875	**C°** 1015 **F°** 1860

FLUX: Bondal Flux – Universal Solder PKF
High Fusing Bondal Flux – Universal Solder 1015W

	Composition									Melting range	Flow Point
Post Solder	**Au**	**Ag**	**Cn**	**Ga**	**In**	**Ni**	**Sn**	**Zn**	**others**	**°C / F**	**°C / F**
.650 Fine Gold Solder **NA1184504**	65.0	13.0	19.6	2.0	–	–	–	<1.0	–	**C°** 785 – 835 **F°** 1445 – 1535	**C°** 830 **F°** 1525
.615 Fine Solder **NA1183504**	61.5	13.1	17.4	–	7.6	–	–	<1.0	–	**C°** 690 – 775 **F°** 1275 – 1430	**C°** 775 **F°** 1425
.585 Fine Solder **NA1182504**	58.5	16.0	18.0	7.2	–	–	–	<1.0	–	**C°** 610 – 725 **F°** 1130 – 1335	**C°** 725 **F°** 1335
Low Fusing White Gold Solder (LFWG) **NA1185604**	56.1	27.4	–	–	<1.0	–	<1.0	15.8	–	**C°** 665 – 710 **F°** 1230 – 1310	**C°** 730 **F°** 1350

FLUX: Bondal Flux – Crown and bridge alloys, Universal alloys, Implant alloys, Ceramic bonded alloys, Predominantly base alloys

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: .3mm and .5mm in spool form.
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.

			Composition								Melting range
Laser Welding Wires			**Au**	**Pt**	**Pd**	**Ag**	**Cu**	**In**	**Zn**	**others**	**°C / F**
Laser Ceramic Yellow PdF	**NA1195304**	.3mm Spool	85.9	12.09	–	–	–	<1.0	1.5	Fe, Mn, Ir, Ta <1.0	**°C** 1055–1170 **°F** 1930–2140
Laser Ceramic Yellow PdF	**NA1195804**	.5mm Spool	85.9	12.09	–	–	–	<1.0	1.5	Fe, Mn, Ir, Ta <1.0	**°C** 1055–1170 **°F** 1930–2140
Laser Ceramic Yellow	**NA1195204**	.3mm Spool	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	**°C** 1085–1215 **°F** 1985–2220
Laser Ceramic Yellow	**NA1195704**	.5mm Spool	85.0	7.5	3.0	3.0	–	1.5	–	Ir <1.0	**°C** 1085–1215 **°F** 1985–2220
Laser C&B Yellow	**NA1195504**	.3mm Spool	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	**°C** 900 – 960 **°F** 1650–1760
Laser C&B Yellow	**NA1196004**	.5mm Spool	75.0	3.0	–	13.5	7.0	1.5	–	Ir <1.0	**°C** 900 – 960 **°F** 1650–1760
Laser Ceramic White	**NA1195104**	.3mm Spool	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	**°C** 1200–1290 **°F** 2190–2355
Laser Ceramic White	**NA1195604**	.5mm Spool	50.0	–	24.4	21.5	–	4.0	–	Ru <1.0	**°C** 1200–1290 **°F** 2190–2355
Laser C&B White	**NA1195404**	.3mm Spool	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	**°C** 985 – 1025 **°F** 1805–1875
Laser C&B White	**NA1195904**	.5mm Spool	18.5	–	6.0	72.5	–	3.0	–	Ir <1.0	**°C** 985 – 1025 **°F** 1805–1875

Platinum Foil

Platinum foil .001	1.55 g	NA1400103

Waxes

Pro-Art® Wax are specially developed dental waxes, each adapted to the respective application. The different wax types are colour coordinated for easier distinction. The Pro-Art waxes allow the dental technician to show every detail exactly. This provides the basis for perfect casting or press results.

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
Blue	45 gm tin	NA2260619
Brown	45 gm tin	NA2260621
Violet	45 gm tin	NA2260623
Green	45 gm tin	NA2260625
Opaque Beige (w/Brn)	45 gm tin	NA2260627
Opaque Beige	45 gm tin	NA2260629
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
Opaque Grey	45 gm tin	NA2260609

IPS Empress® Wax

- Created specifically for use with the IPS e.max and 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.

IPS Empress® Wax		
Beige	45 gm tin	NA2260611

Silicones

Laboratory silicones support a variety of workflows in the lab. The special properties of the laboratory silicones allow easy processing and at the same time ensure a smooth workflow. Ivoclar Vivadent's well-coordinated selection of laboratory silicones includes universal impression materials for the fabrication of matrices when finishing dentures, a duplicating silicone for the reproduction of models, as well as a highly elastic silicone for the production of gingival masks during the manufacture process of esthetic restorations.

Sil-Tech®

Sil-Tech		
Putty	2.6 kg	563051AN
Putty	5 kg	563192AN
Putty	900 g trial	564620AN
Plus Putty	2.6 kg	564623AN
Plus Putty	5 kg	564624AN
Gel	40 ml	563193AN
Super	1 kg + 1 kg	563196AN
Super	5 kg + 5 kg	564622AN
Super	450 g + 450 g	564621AN

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

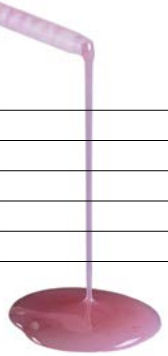
Double Take	1 kg	563050AN
Double Take	5 kg	563191AN

Silicones

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
Gingitech Mixing Tips	563194AN
Gingitech Injection Tips	563195AN
Gingitech Dispenser	563054AN

Sure Take

Sure Take Surfactant	120 ml	563055AN

Accessories

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).

Bondal Flux	.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.

High Fusing Bondal Flux	.5 oz. jar.	NA2100302

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