



# NON-PRECIOUS METAL DENTAL ALLOYS

ALLOYS • CAD/CAM BLANKS • DENTAL POWDER



Ador Dental GmbH | Zum Jägerhof 2 | 40724 Hilden, Germany

# DENTAL ALLOYS

## DENTAL POWDER

### ADORBOND CC PLUS POWDER

#### Composition in %:

Co 63,6 · Cr 24,8 · W 5,5 · Mo 5,0 · Si 1,1 · Elements < 1%: Fe, Mn, Nb

ADORBOND® CC PLUS is a cobalt-based dental metal-ceramic alloy. ADORBOND® CC PLUS powder is free of nickel, cadmium, beryllium and lead and conforms to EN ISO 22674 type 5 for applications where parts of the appliance require a combination of high stiffness and yield strength, e.g. thin removable partial dentures, parts with thin cross-sections and clasps. ADORBOND® CC PLUS can be used both as a partial denture alloy and as a metal-ceramic alloy and is available in two grain sizes: 10-30 µm and 15-45 µm.

Technical Data:	15/45 µm	10/30 µm
Density (g/cm <sup>3</sup> ):	8,2	8,2
Vickers hardness (HV 10):	520	520
CTE:		
25 – 500 °C (10-6 K-1)	14,3	14,3
20 – 600 °C (10-6 K-1)	14,5	14,5
Maximum Firing Temperature (°C):	980	980
0,2-% Yield Point R (MPa):	1100	1150
Elastic modulus (N/mm <sup>2</sup> ):	275	275
Elongation at break (%):	5	5
tensile strength (MPa):	1300	1350

- RRP: 199,90 € /kg (15-45 µm)

- RRP: 249,90 € /kg (10-30 µm)



# DENTAL ALLOYS

## DENTAL POWDER

### ADORBOND BC POWDER

#### Composition in %

Co 61,7 · Cr 27,8 · W 8,5 · Si 1,6 · Elements < 1%: Fe, Mn, Nb, N

ADORBOND® BC Powder is a cobalt-based dental metal-ceramic alloy. ADORBOND® BC Powder is free of nickel, cadmium, beryllium and lead and conforms to EN ISO 22674 type 5 for applications where parts of the appliance require a combination of high stiffness and yield strength, e.g. thin removable partial dentures, parts with thin cross-sections and clasps. ADORBOND® BC powder can be used both as a partial denture alloy and as a metal-ceramic alloy and is available in two grain sizes: 10-30 µm and 15-45 µm.

Technical Data :	15/45 µm	10/30 µm
Density (g/cm <sup>3</sup> ):	8,3	8,4
Vickers hardness (HV 10):	285	290
CTE:		
25 – 500 °C (10-6 K-1)	14,1	14,1
20 – 600 °C (10-6 K-1)	14,4	14,4
Maximum Firing Temperature (°C):	980	980
0,2-% Yield Point R (MPa):	1120	1190
Elastic Modulus (N/mm <sup>2</sup> ):	236	236
Elongation at break (%):	5	5
tensile strength (MPa):	1200	1290

- RRP: 199,90 € /kg (15-45 µm)

- RRP: 249,90 € /kg (10-30 µm)





# DENTAL ALLOYS

## PARTIAL DENTURE & METAL CERAMIC ALLOYS

### ADORBOND CC

A cobalt-based dental metal-ceramic alloy. It's free of nickel, cadmium, beryllium and lead and complies with EN ISO 22674 type 4 for applications with thin cross-sections that are exposed to very high forces.

**Composition in %:**

Co 62,5 · Cr 24,6 · Mo 2,9 · W 8,5 · Si 1,3  
Elements < 1%: Nb, Mn, Fe, N

- from 239,92 € /Piece



### ADORBOND CN

A nickel - chrome based bonding alloy. It's free of cadmium, beryllium and lead and complies with EN ISO 22674 type 3 for fixed multi-unit dentures.

**Composition in %:**

Ni 62,7 · Cr 24,4 · Mo 11,0 · Si 1,6  
Elements < 1%: Nb, Mn, Fe

- from 159,92 € /Piece



### ADORON LX

A cobalt- based laser-capable high-quality partial denture alloy. It's free of nickel, cadmium, beryllium and lead and complies with EN ISO 22674 type 5 for applications where parts of the device require a combination of high stiffness and yield strength.

**Composition in %:**

Co 62,5 · Cr 29,5 · Mo 5,5 · Si 1,3  
Elements < 1%: Nb, Mn, Fe, C, N

- from 134,93 € /Piece



# DENTAL ALLOYS

## PARTIAL DENTURE & METAL CERAMIC ALLOYS

### ADORON FH

A cobalt-based spring-hard all-round partial denture alloy. It's free of nickel, cadmium, beryllium and lead and complies with EN ISO 22674 type 5 for applications where parts of the device require a combination of high stiffness and yield strength.

**Composition in %:**

Co 62,5 · Cr 30,0 · Mo 5,1 · Si 1,0 · Mn 1,0  
Elements < 1%: Nb, N, Fe, C

- from 119,93 € /Piece



Technical Data	ADORBOND®	ADORBOND®	ADORON®	ADORON®	ADOR CC	ADOR NEM
(Reference Value:)	CC	CN	LX	FH	SOLDER	LASER-WIRE
Density (g/cm³)	8,3	8,2	8,2	8,2	8,3	8,3
Vickers hardness (HV10)	285	180	365	375		
CTE 25–500 °C (10 <sup>-6</sup> K <sup>-1</sup> )	13,9	13,9	–	–		
CTE 20–600 °C (10 <sup>-6</sup> K <sup>-1</sup> )	14,0	14,0	–	–		
Melting interval (°C)	1.304–1.369	1.250–1.340	1.295–1.345	1.260–1.320	1.140-1.210	ca. 1.350
Casting temperature (°C)	ca. 1.470	ca. 1.440	1.450	ca. 1.440		
Yield point R <sub>p0,2</sub> MPa	490	330	640	620		
Zugfestigkeit (N/mm²)	–	–	880	920		
Elastic modulus (N/mm²)	ca. 210.000	ca. 205.000	ca. 220.000	ca. 220.000		
Elongation at break A <sub>5</sub> (%)	10	15	7,5	4,5		

# DENTAL ALLOYS

## SOLDER AND LASER-WIRE

### ADOR CC SOLDER

- Universal Solder for ADORBOND® CC, CN and ADORON® FH, LX - in bar/stick form ø 1,5 mm x ca. 75 mm length
- suitable for all non-precious metal dental alloys

Co 62,0 % · Cr 29,5 % · Si 3,0 % · Mo 4,5 %  
Elements < 1%: B, C, Fe, Mn

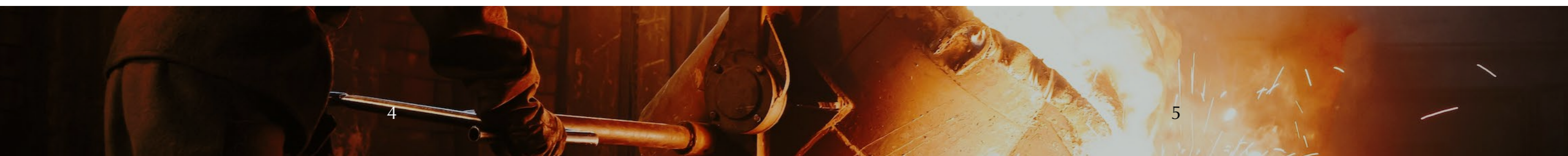
- RRP: 5,90 € /5g

### ADOR LASER-WIRE

- suitable for all non-precious metal dental alloys
- available in two thicknesses: ø 0,5 mm, ø 0,35

Co 65,2 % · Cr 27,7 % · Mo 5,8 %  
Elemente < 1%: Si · Mn · Fe · N

- RRP: 69,90 € - 75,90 € /2m





# DENTAL ALLOYS

## CAD/CAM BLANKS

# DENTAL ALLOYS

## CAD/CAM BLANKS

### ADORBOND BC BLANK

#### Composition in %:

Co 61,7 · Cr 27,8 · W 8,5 · Si 1,6  
Elements < 1%: Fe, Mn, Nb, N

ADORBOND® BC Blank is a cobalt-based dental metal-ceramic alloy. ADORBOND® BC Blank is free of nickel, cadmium, beryllium and lead and corresponds to type 4 according to EN ISO 22674 for applications with thin cross-sections that are exposed to very high forces, e.g. removable partial dentures, clasps, thin veneered single crowns, fixed full-arch dentures or bridges with small cross-sections, bars, attachments and implant-supported superstructures.

#### Technical Data:

Density (g/cm<sup>3</sup>): 8,4  
Vickershardness (HV 10): 290

CTE:  
25 – 500 °C (10-6 K-1) 14,1  
20 – 600 °C (10-6 K-1) 14,4

Highest recommended  
Temperature (°C): 980

0,2-% Yield point (MPa): 400  
Elastic modulus (GPa): 195  
Elongation at Break A5 (%): 8  
Melting Interval (°C): 1.310-1.400

- Size/Thickness: 98,5x8 mm - 98,5x24 mm  
RRP: 149,90 € - 249,90 €



### ADORBOND CV BLANK

#### Composition in %:

Co 63,0 · Cr 29,0 · Mo 5,8 · Si 1,2  
Elements < 1%: Fe, Mn, Nb

Adorbond CV Blank is a cobalt-based dental metal-ceramic alloy. Adorbond CV Blank is free of nickel, cadmium, beryllium and lead and complies with EN ISO 22674 type 4 for applications with thin cross-sections that are exposed to very high forces, e.g. removable partial dentures, clasps, thin veneered single crowns e.g. removable partial dentures, clasps, thin veneered single crowns, fixed full-arch dentures or bridges with small cross-sections, bars, fixings, cross-sections, bars, attachments and implant-supported superstructures.

#### Technical Data:

Density (g/cm<sup>3</sup>): 8,2  
Vickershardness (HV 10): 330

CTE:  
25 – 500 °C (10-6 K-1) 14,2  
20 – 600 °C (10-6 K-1) 14,4

Highest recommended  
Temperature (°C): 980

0,2-% Yield point (MPa): 610  
Elastic modulus (GPa): 200  
Elongation at break A5 (%): 6,5  
Tensile strength (MPa): 610

- Size/Thickness: 98,5x8 mm - 98,5x24 mm  
RRP: 149,90 € - 249,90 €

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