





### CATALOGUE

### **MERZ DENTAL**







### **Merz Dental**

### **Services**



### www.merz-dental.com

### RELIABLE SUCCESS THROUGH QUALITY, SAFETY AND SERVICE

For more than 70 years, Merz Dental has been developing, manufacturing and selling high-performance dental products to quality standards Made in Germany at the company headquarters and production site in Lütjenburg, on the coast of Schleswig-Holstein.

As a manufacturer of medical devices, a system provider for denture acrylics and acrylic teeth and specialist in CAD/CAM technologies, we supply quality materials for aesthetic and sustainable prosthetics in practices and laboratories. We sell our dental laboratory product portfolio as well as a large number of dental products and consumables all over the world - we accompany teeth for a lifetime. Merz Dental has set milestones: from the first fully anatomical tooth to the Baltic Denture System describes our history, the desire for improvement and optimised cooperation between dentists and dental technicians.

We focus with passion and competence on the desires and needs of our customers and strive to fulfill them. Our products are the result of real customer orientation and experience. That's why we at Merz Dental have achieved a leading global position as a medium-sized company in the German dental industry - we're proud of that.

### **DIGITAL DENTURE - 100 % YOUR WAY**

From the scanning process to the CAD of models, splints or try-ins, up to the subtractive or additive manufacturing of aids or dentures - with Merz Dental your entry into the digital workflow is flexible and tailored to your needs. Profit from more precise results, increased process reliability and more efficiency. Add new technologies and innovative material developments to proven work processes.

### **ONLINE - INFORMATION**

At www.merz-dental.com you will find detailed product information and interesting facts from our areas of expertise as well as our current General Terms and Conditions

- Areas of application
- Properties
- Ingredients
- Instructions for use
- Safety Data Sheets
- Downloads
- Work instructions
- Events, fairs and courses

### **Merz Dental**

Merz Dental is certified according to EN ISO 13485 and thus offers the security and advantages of a future-oriented quality management system.



Further information









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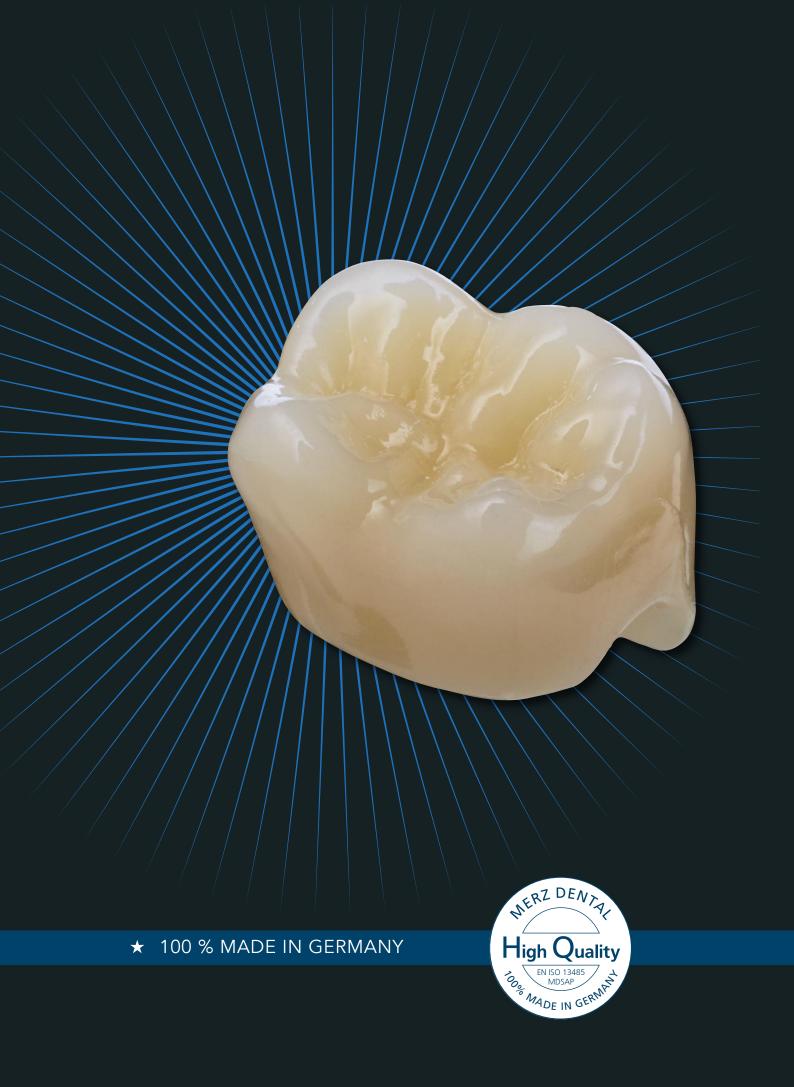
TEETH / VENEERS		CAD CAM	
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### 



★ LIFELIKE MOULDS

★ HIGH END QUALITY





### of teeth he modern

### **ANTERIORS**



### integral®

Fully anatomical, juvenile 5 layers



10 10 11 CBI°



### artegral<sup>®</sup> life

Fully anatomical

5 layers





### Polystar® Selection EDITION

Semi anatomical

4 layers



CBI®



### **Polystar® HK**

Semi anatomical

3 layers







integral®

### **POSTERIORS**



Fully anatomical, juvenile

4 layers 30° PSG® Preventive Shift Groove







► For all customary set-up concepts

- ► Distinct centric occlusion by tripodization
- ► Freedom in centric

### artegral<sup>®</sup> life

artegral<sup>®</sup> life HD



Fully anatomical, functional

4 layers

25°

PSG® Preventive Shift Groove







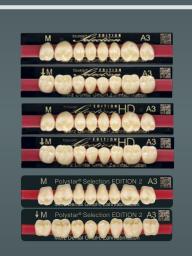
XL-XS

- ► Cusp angle distal declining
- ► For all customary set-up concepts
- ► Easy handling with self-finding centric
- ► Integrated sagittal and transverse compensation curve
- ► Sagittal set-up aid

### **Polystar® Selection EDITION**

**Polystar® Selection EDITION HD** 

**Polystar® Selection EDITION 2** 



Semi anatomical

4 layers

 $PSG^{\ast} \text{ Preventive Shift Groove}$ 











Polystar® Selection EDITION

- ► Especially for fully balanced occlusion
- ▶ Quick, easy, effective
- ► Sagittal set-up aid



Polystar® Selection EDITION 2

### **Polystar® HK**



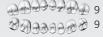
Semi anatomical

3 layers





15°



► Fully balanced occlusion

### **DeltaForm®**

**DeltaForm® HD** 



Semi anatomical, perfect for lingualized occlusion

3 layers

20°→15° PSG® Preventive Shift Groove







- ► Cusp angle distally declining
- ► Lingualized occlusion
- ► Self-finding centric
- ► Autonomous masticatory stability due to mortar-pestle-principle and abrasion facets



### **Tooth mould terminology**

### NATURAL, INDIVIDUAL AND EFFICIENT

The mould classification of prefabricated teeth is mainly based on the classic philosophies of LEE, BALTERS, HÖRAUF, WILD and KRETSCHMER.

This resulted in gender-unspecific classifications of the upper prefabricated anterior teeth according to square, rectangular, triangular, oval and round moulds, which in practice usually requires an extensive tooth inventory with the corresponding expense. However, the classic mould terminology neglects the morphology of natural female and male tooth moulds.

Based on the research results measuring anterior teeth on fully dentulous patients by Prof. Dr. Siebert (Free University of Berlin, now Charité), Merz Dental developed an innovative and recognised mould terminology, the patented CBI®-System.

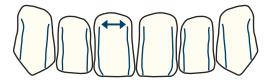
The classification of the C, B or I mould is based on the ratio between the maximum mesiodistal width and the enamel as well as light refracting flanges in relation to the outer perimeter of the upper anterior teeth. By this means in order to imitate feminine and masculine looking upper anterior teeth, a successful and contemporary mould system was developed for our veneers and tooth series integral®, artegral® life, artVeneer® life, Polystar® Selection EDITION and Polystar® Selection EDITION 2.



### The CBI® System

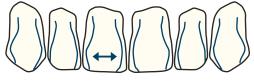
### **C-mould**

cervical emphasized striking, firm, masculine



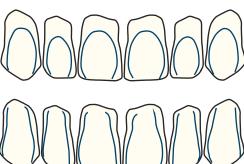
### **B-mould**

body emphasized harmonious, neutral



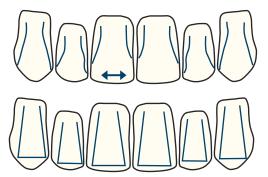
### **BO-mould**

**BI-mould** 



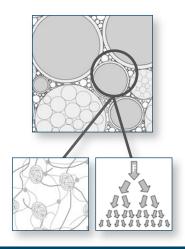
### **I-mould**

incisal emphasized grace, elegance, feminine

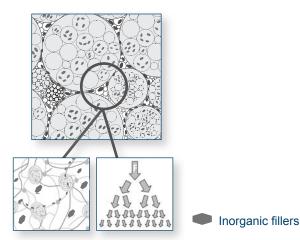


### **IT-mould**

### THE OPTIMUM DENTAL MATERIAL FOR EVERY CASE







### **OMP-N®**

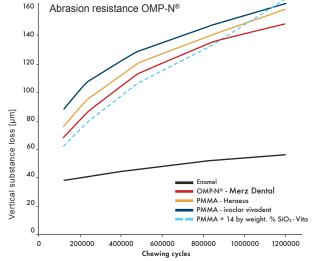
**Organic Modified Polymer-Network** 

monomer used in tooth production.

Cross-linked macromolecule structures in the submicroscopic range occupy the spaces between larger polymer beads in the chemical bond, which also reduces the proportion of

High elasticity, no splintering thanks to the formulation free of fillers and fibres. An integrated shock absorber compensates for the forces acting on the tooth and the denture base area is relieved. OMP-N® presents a very good, plaqueresistant surface compaction after polishing, even with conventional polishers, polishing wheels and polishing agents.

- Highly cross-linked, abrasion-resistant, tissue-friendly
- Chemically resistant, color stable
- Strong bond to the denture base acrylic
- Temperature resistant
- Easy to process and polish
- Free from inorganic fillers and fibres
- Elastic and shock absorbing



Graph based on Ghazal et al.: Two-body wear of resin and ceramic denture teeth in comparison to human enamel. Dental Materials 4 (2007) 24, p. 502-507

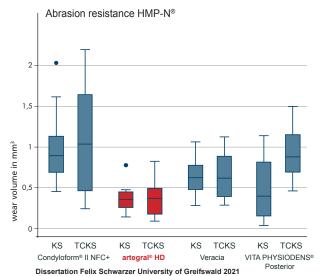
### HMP-N®

**Highly Modified Polymer-Network** 

HMP-N® is a dental material developed for implant- and periodontal-supported prosthetics with biomimetic properties learned from nature.

The Highly Modified Polymer Network (HMP-N®) offers a balanced combination of properties thanks to its homogeneous structure with extremely fine crystalline fillers.

- Hard-wearing and abrasion resistant, ensuring the vertical support
- Shock absorbing the impact and shear forces on the tooth
- Self-regulating biomimetic adaptation reduces hyperbalance contacts through individual function engraving
- Homogeneous PMMA layer, simple processing when completing the denture
- Plaque-resistant thanks to the uniform PMMA structure



Presentation of the wear results for each group for the chewing simulation method without previous thermal alternating loads (KS) and chewing simulation with previous thermal alternating loads (TCKS); Outliers are shown individually as soon as they are more than 1.5 interquartile ranges away from the Q25 or Q75 percentile.

### **DENTAL MATERIAL**





Proven biocompatibility OMP-N® and HMP-N®

### **High End Quality Made in Germany**

### INTELLIGENT POLYMER WITH INNOVATIVE HIGH DENSITY

The small, only approx. 4 %, structure-forming, inorganic filler content is chemically connected to the surrounding PMMA acrylic matrix by methacrylic silane bridges.

Density and structure compensate for chewing wear and tear as well as shearing stresses that can lead to chipping and fractures.

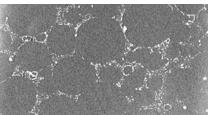
The innovative pairing of the smallest, evenly distributed inorganic fillers and coordinated different complex spherical polymer macromolecules result in an innovatively high density for polymers.

The high proportion of inorganic macro and micro fillers can be clearly seen in conventional dental composite materials. When delamination occurs along the fillers, micro-cracks develop which can cause fractures due to a "ladder effect" when force is applied. The hardest material is not always the best.

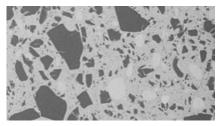
### CHEMICAL BOND THROUGH HOMOGENE STRUCTURES

The dental materials OMP-N® and HMP-N® are characterized by a homogeneous and uniform macromolecular structure. Hereby, a stable, resilient chemical bond to the denture base acrylic is created when processing the dentures.

### HMP-N°



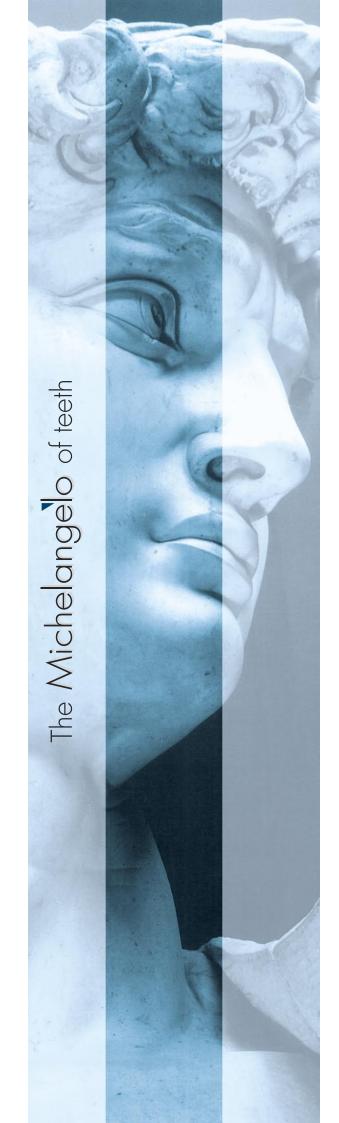
Nano Filled Composite - composite dental material



REM 900x Merz Dental Material Development



## 











### integral®

### THE MICHELANGELO OF TEETH

The world's first fully anatomical anterior tooth

The perfect reproduction of the natural proportions and aesthetics, as represented by the ingenious Michelangelo Buonarroti in his sculptures, was the aim with which this world's first fully anatomical tooth series was developed.

The elaborate layer structure with its characteristic dentine fingers, the opalescent transparent edge and the lifelike light refraction on the incisal edge is consistently orientated on its natural model, the juvenile tooth.

The functional superiority of the integral® is reflected in the applicability of all contemporary occlusion concepts. From full balanced to group guidance to anterior guidance, the fully anatomical occlusal surfaces always allow a clear centric finding with physiological freedom. Even with teeth in close proximity, the naturally designed palatal surfaces on the one hand support the guidance of the anterior teeth, on the other hand they allow comfortable freedom of movement for the patient.

### **FEATURES and BENEFITS**

- Highly cross-linked, filler and fibre-free, abrasionresistant OMP-N<sup>®</sup>
- Tissue-friendly, plaque-resistant
- Chemically resistant, color stable
- Very easy to process and polish

MATERIAL OMP-N®

### SET-UP CONCEPT

Tooth-to-tooth set-up

### THE ANTERIOR

Fully anatomical, juvenile



### THE POSTERIOR

■ Fully anatomical, juvenile



- All common occlusion concepts
- Clear centric finding through tripodization
- Freedom in centric

### **SHADES**

16 V-Classic shades (A1-D4) and 4 Bleach shades (BL1-BL4)



Mould chart REF 1090049



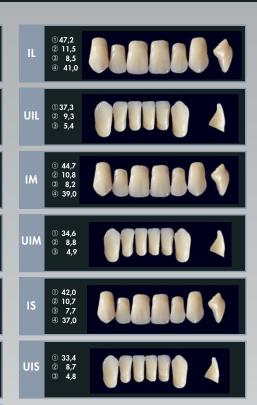
B-mould



I-mould









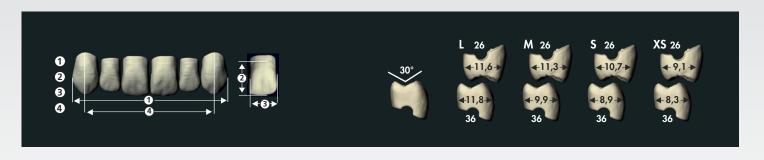












TOOTH COMBINAT	TION CHART	00111100
CL	UCL	L (M)
CM	UCM	M (S)
CS	UCS	S (XS)
BL BM BS BXS	UBL (UBLL) UBM UBS UBXS	L (M) M (S) S (XS) XS (S)
IL	UIL	L (M)
IM	UIM	M (S)
IS	UIS	S (XS)







# 













### artegral® life / artegral® life HD

### THE NEXT HIGH LEVEL GENERATION

Anatomical premium class with aesthetic demands at the highest level

Together with a successful surface texture, a natural opalescence and fluorescence, the novel, highly aesthetic and multi-complex layer concept creates the successful image of naturally looking anterior teeth, even in different light conditions.

Incisal translucencies and subtle mamelons increase the depth of the anterior. In the posteriors, the additional reinforced circumferential enamel provides a 3-D effect with an occlusal depth effect and also serves as a grinding reserve for lasting aesthetics.

The incisal translucency of the anteriors is an expression of juvenile vital teeth, which can be quickly and easily adapted to age by individual characterization. A special flanged design (layering) creates an excellent adaptation to the surrounding shades.

### **FEATURES and BENEFITS**

- Unique, highly aesthetic multi-layer structure
- Harmonious shade gradient for a brilliant natural opalescence and fluorescence in different light conditions

### **SHADES**

16 V-Classic shades (A1-D4) and 4 Bleach shades (BL1 - BL4)



artegral<sup>®</sup> life Shade Guide (A-D + Bleach) REF 1030253

### **MATERIAL**

OMP-N®

A choice of two types of material for the posteriors: artegral<sup>®</sup> life made of OMP-N<sup>®</sup> artegral<sup>®</sup> life HD made of HMP-N<sup>®</sup>

### SET-UP CONCEPT

Tooth-to-tooth set-up

### THE ANTERIOR

Fully anatomical



### THE POSTERIOR

■ Fully anatomical, functional



- Cusp inclination decreasing distally
- All common occlusion concepts
- Easy handling with self-centring
- Integrated sagittal and transverse compensation curve
- Sagittal set-up aid





Folder REF 1092329

Formenkarte REF 1092233

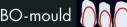






B-mould





① 49,4 ② 12,0 ③ 8,9 ④ 40,0 ⑤ 35,0

BOL





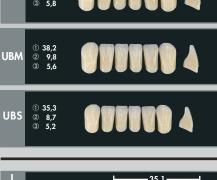




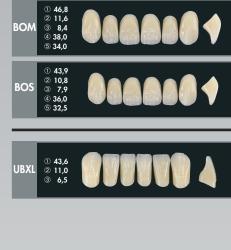




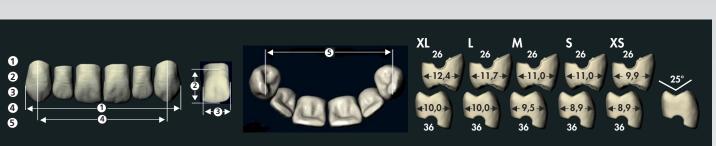




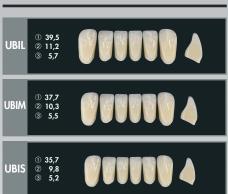




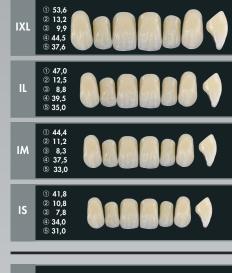
32,8













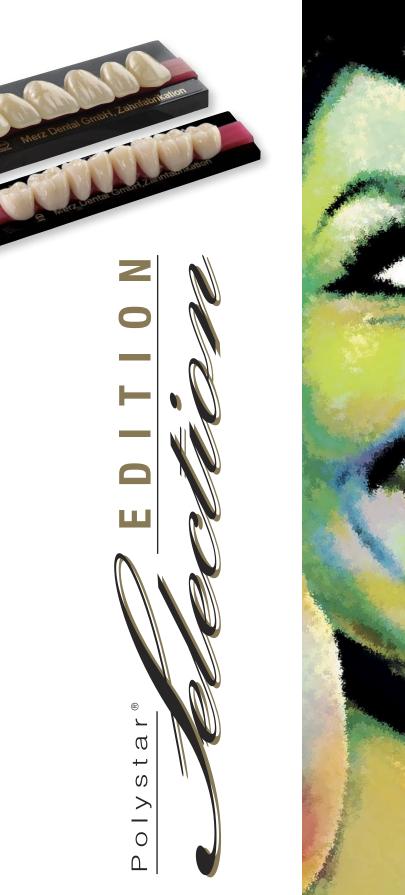


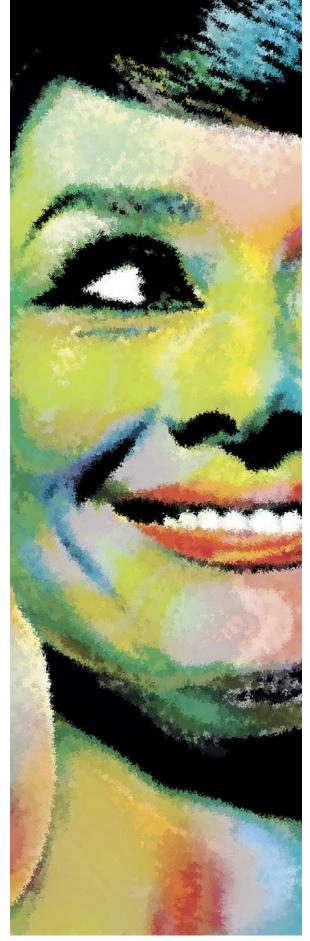
TOOTH COMBINATION	ON CHART	ACCCCAA
	00000	0000000
C L	UC L	L/XL
C M	UC M	M
C \$	UC S	S/XS
B XL	UB XL	XL
B L	UB L	L/XL
B M	UB M	M
BS	UB S	S/XS
BO L	UBI L	L/XL
BO M	UBI M	M
BO S	UBI S	S/XS
BI L	UBI L	L/XL
BI M	UBI M	M
BIS	UBI S	S
- I XL	UB XL	XL
I L	UI L	L
IM	UI M	M <sub>.</sub>
I S	UI S	S/XS
IT L	UI L	L
IT M	UI M	M
IT S	UI S	S/XS









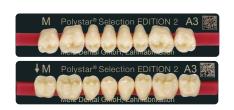


The Modern Art Of Teeth









### Polystar<sup>®</sup> Selection EDITION Polystar<sup>®</sup> Selection EDITION HD

### Polystar® Selection EDITION 2

### TOOTH-TO-TOOTH SET-UP

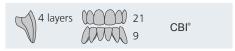
**MATERIAL** 

OMP-N®

A choice of two types of material for the posteriors: Polystar® Selection EDITION made of OMP-N® Polystar® Selection EDITION HD made of HMP-N®

### THE ANTERIOR

Semi-anatomical



### THE POSTERIOR

Semi-anatomical



### SET-UP CONCEPT Tooth-to-tooth set-up



- Especially for fully balanced occlusion
- Fast, simple, effective
- Sagittal set-up aid

### **SHADES**

16 V-Classic shades (A1-D4) and 4 Bleach shades (BL1 - BL4)



Polystar® Selection EDITION Shade Guide (A-D + Bleach)
REF 1030264

### 4-LAYER POSTERIOR FOR THE CLASSIC AND SYSTEM-ORIENTED TOOTH-TO-TWO-TEETH SET-UP

MATERIAL OMP-N®

### SET-UP CONCEPT

For the classic and system-oriented tooth-to-two-teeth set-up, we recommend the Polystar® Selection EDITION 2, which is transversally narrower and thus allows more tongue space.



### THE POSTERIOR

Semi-anatomical



- Safe centric
- Harmonic balancing for the classical compensation curve
- Narrow posterior tooth
- Flat cusps (15°), convex occlusal contacts
- Identical left and right side by CAD/CAM reflection
- Anatomical deep fissures for high chewing performance with low chewing force
- Reduced basal contour



Mould chart REF 1090779



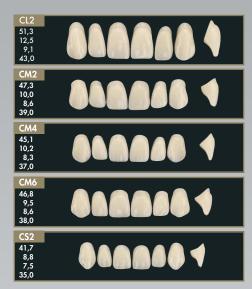


B-mould









8L2 48,2 11,7 9,1 40,0	
47,6 11,1 9,0 39,0	868888 1
45,7 10,8 8,6 37,0	848848 1
43,3 10,6 8,0 35,0	*********
BS2 39,8 9,2 7,5 32,0	948844











### Polystar® Selection EDITION







### Polystar® Selection EDITION 2



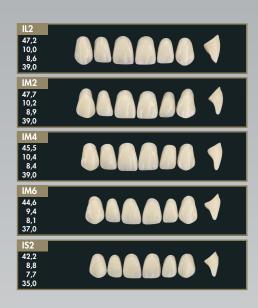












UL2		
38,6		
11,5 5.7		4
	•••••	

TOOTH COMBINATION CHART		Polystar® Selection EDITION	Polystar® Selection EDITION 2
44444	771117	1998	2511
CL 2	UL 2/UL 4	XL/L	XL/L
CM 2	UM 2 / UM 4 / UM 8 / UM 10	L/M	L/M
CM 4	UM 4 / UM 2	М	М
CM 6	UM 6 / US 2	M/S	M/S
CS 2	US 2/US 4	S	S
BL 2	UL 2/UL 4/UM4	XL / L	XL / L
BM 2	UM 2 / UM 4 / UM 8 / UM 10	L/M	L/M
BM 4	UM 4 / UM 2	M	M
BM 6	UM 6 / US 2	M/S	M/S
BS 2	US 2/US 4	S	S
BIL 1	UL 2	XL	XL
BIL 2	UL 2/UL 4	L	L
BIM 2	UM 2 / UM 4 / UM 8 / UM 10	L/M	L/M
BIM 4	UM 4 / UM 2	M	М
BIM 6	UM 6 / US 2	M/S	M/S
BIS 2	US 2/US 4	S	S
IL 2	UL 2/UL 4	L	L
IM 2	UM 2 / UM 4 / UM 8 / UM 10	L/M	L/M
IM 4	UM 4 / UM 2	M	M
IM 6	UM 6 / US 2	M/S	M/S
IS 2	US 2/US 4	S	S











### $\frac{1}{2}$











### Polystar® HK

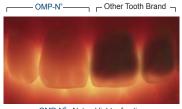
### A CLASSIC AMONGST DENTURE TEETH

The Polystar® HK is the classic concept tooth with a proven occlusal anatomy. It is particularly suitable for gerontoprosthetics. A classic, which was the world's first acrylic tooth made from OMP-N®. The traditional concept of this all-rounder is the high aesthetic and functional quality for an uncomplicated solution in the wide range of prosthetics. Due to its excellent abrasion resistance, color stability and biocompatibility, the Polystar® HK meets the requirements of demanding users.

### **FEATURES and BENEFITS**

- Three-layer anterior with effects
- Quick and easy tooth set-up
- Simple occlusal anatomy reduces interference during laterotrusion movements
- Tissue friendly
- Color stable
- Easy to process
- Excellent to polish





OMP-N°- Natural light refraction



Polystar® HK Shade Guide (A-D) REF 1090326

### MATERIAL OMP-N®

### SET-UP CONCEPT Tooth-to-two-teeth set-up

### THE ANTERIOR

Semi-anatomical



### THE POSTERIOR

Semi-anatomical



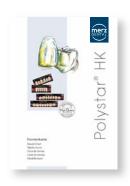




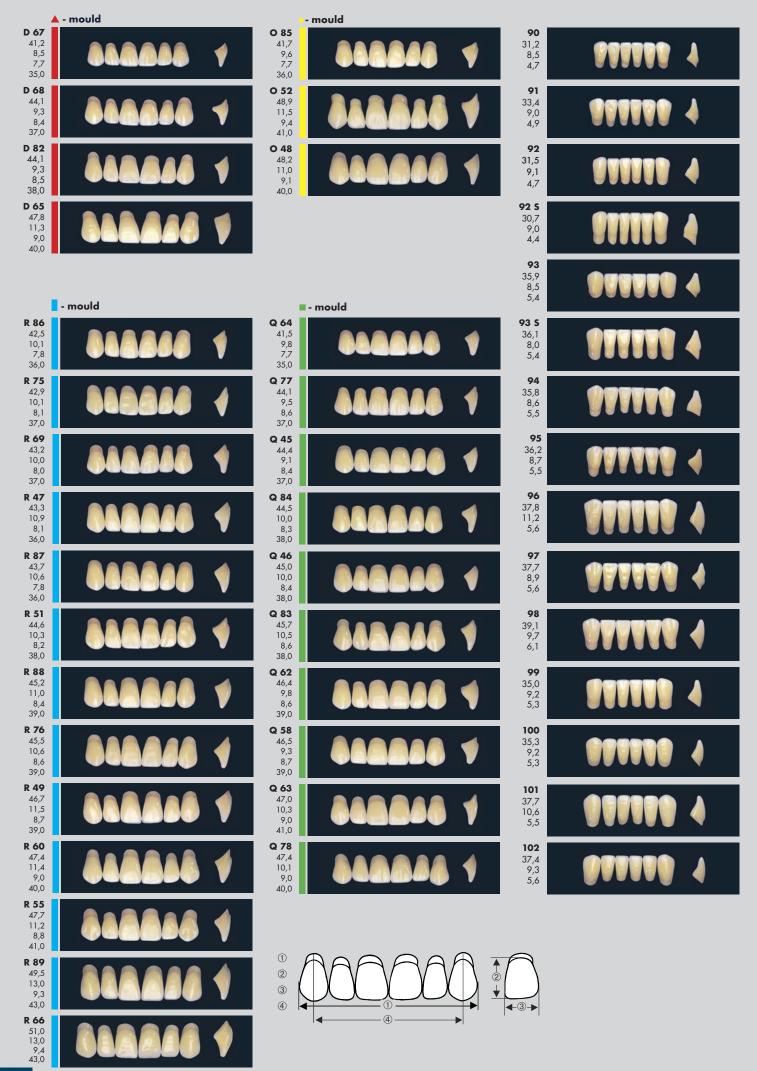
Fully balanced occlusion

### **SHADES**

16 V-Classic shades (A1-D4)



Mould chart REF 1090159



### **26 1000000 1 26 26 27.6 27.6 27.6 27.8 26 27.8 26 27.8 26 27.8 26 27.8 27.8 27.8 28 28 28 28 29.8 29**

**2** ① 33,1 / ② 34,7



**3** ① 32,5 / ② 34,4



**35** ① 32,5 / ② 34,4



**4** ① 30,0 / ② 32,7



6 1 29,4 / 2 30,9



**30** ① 31.8 / ② 33.9



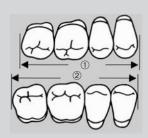
**40** ① 30,5 / ② 33,2



**50** ① 30,2 / ② 32,2



**60** ① 29,9 / ② 31,4



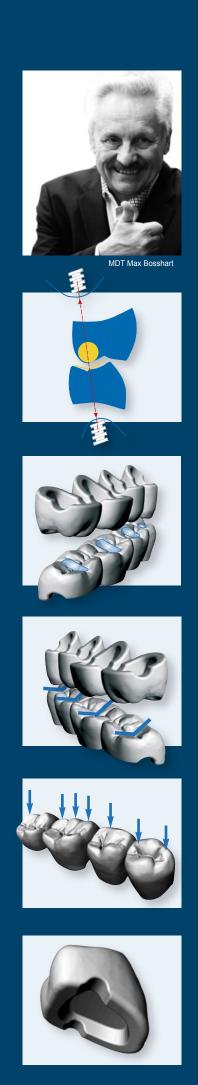
### TOOTH COMBINATION CHART

	ANTERIORS		POSTERIORS	
	OK¹ UK²			
<b>A</b>	D 67	90/92	6/60	
<b>A</b>	D 68	93/94	4/40/50	
<b>A</b>	D 82	94/100	4/40/50	
<b>A</b>	D 65	96/98/101	2/38/30	
•	R 86	90/92/94	4/40/50	
	R 75	91	6/50/60	
•	R 69	91	4/40/50	
•	R 47	94/95	3/3\$/30	
•	R 87	99/100	3/3S/4/30/40	
•	R 51	95/100	4/40/50	
•	R 88	99/100	3/3S/4/30/40	
•	R 76	99/100	4/40/50	
•	R 49	96/97/102	2/3/38/30	
•	R 60	98/101	2/38/30	
	R 55	98/101	2/3/3S/30	
	R 89	98	2	
	R 66	98	2	
	O 85	90/92/94	6/50/60	
	O 52	98	2/3/35/4/30	
	O 48	96/97/102	2/3/3S/30	
•	Q 64	93	6/60	
	Q <i>77</i>	93/94	3/4/40/50	
•	Q 45	93/100	4/40/50	
٠	Q 84	93/94	4/40/50	
•	Q 46	93/100	4/40/50	
٠	Q 83	95/100	3/4/40/50	
	Q 62	97/102	3/4/40/50	
	Q 58	102	3/4/40/50	
٠	Q 63	98/101	3/3S/4/30/40	
	Q <i>7</i> 8	95/102	3/3S/4/30/40	

<sup>1</sup>OK = upper <sup>2</sup>UK = lower

- ▲ D = triangular
- R = rectangular
- O = oval
- Q = square

### @ eltaForr











### DeltaForm® / DeltaForm® HD

### LINGUALIZED OCCLUSION

With its occlusal surfaces specially designed for lingualization and its characteristic abrasion facets as well as low cusp inclination, the DeltaForm® is the contemporary, semi-anatomical alternative to ABC-contact support. Developed for those who like semi-anatomical posteriors with lines of force centered on the alveolar ridge, avoidance of horizontal impulses and a self-finding "gentler" centric for their prosthetics.

The mortar-pestle ratios of the occlusal surfaces (20° - 15°) allow for a secure balance, supported by the 3-layer wear facets. DeltaForm® also has the anatomy necessary for combined dentures. The properties of the DeltaForm® posteriors are the reinterpretation of the latest acrylic technologies. Simple, extremely quick set-up, minimised grinding and high chewing stability increase the economic potential.

### **FEATURES and BENEFITS**

- Spacious, self-finding centric
- Mortar and pestle concept with tooth-to-tooth relationship
- Joint-adequate low cusp inclination
- Patented large-area mortar (recess) for self-regulating occlusion
- Reduction of the risk of hyperbalance due to abrasion facets during balancing
- Set-up with and without A-contact without loss of stability or statics
- Thanks to the special occlusion mould, the lingualized occlusion concept directs the chewing force towards palatal onto the jaw ridge
- Basal groove, Preventive Shift Groove (PSG®) prevents twisting and tilting during wax-up
- The reduced contour of the tooth base makes it easier to adapt to the alveolar ridge contour
- Very easy to process and polish

### MATERIAL

OMP-N®

A choice of two types of material for the posteriors: **DeltaForm**<sup>®</sup> made of **OMP-N**<sup>®</sup> **DeltaForm**<sup>®</sup> **HD** made of **HMP-N**<sup>®</sup>

### SET-UP CONCEPT

Lingualized occlusion

### THE POSTERIOR

Semi-anatomical









- Cusp inclination decreasing distally
- Mortar-pestle concept with tooth-to-tooth relationship
- Self-findig centric
- Autonomous chewing stability through mortar-pestle principle and abrasion facets

### **SHADES**

16 V-Classic shades (A1-D4) and 4 Bleach shades (BL1 - BL4)



Mould chart REF 1090170



















### **TOOTH COMBINATION CHART**

018844	077770	@@####@@ @@###########################
Polystar® HK	Polystar® HK	DeltaForm®
• - mould 048	102/101/96	XL / L
▲ - mould D82 D68	94/100 100/94/93/96	M/S/XS M/S
R66 R49 R76 R88 R47 R86	91/100/93 100/93/99 99/102/101 99/102/101 101/96 96	XS / S / M S / M M / L M / L M / L XL
Q75 Q62 Q58 Q46 Q84 Q45	91/100/94/93 94/99 99/102 102/101 93/99/102 102/101	XS / S XS / S S / M M / L M / L M / L

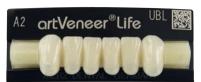
	Q45 	102/101		M / L
in <b>i</b> tegral®	artegral <sup>®</sup> Life	in <b>i</b> tegral°	artegral <sup>®</sup> Life	DeltaForm®
CL CM CS	CL CM CS	UCL UCM UCS	UCL UCM UCS	XL/L M S/XS
BL BM BS	BXL BL BM BS	UBLL UBL UBM UBS	UBXL UBL UBM UBS	XL XL/L M S/XS
	BOL BOM BOS		UBIL UBIM UBIS	XL/L M S/XS
	BIL BIM BIS		UBIL UBIM UBIS	XL/L M S
IL IM IS	IXL IL IM IS	UIL UIM UIS	UBXL UIL UIM UIS	XL L M S/XS
	ITL ITM ITS		UIL UIM UIS	L M S/XS
Polystar <sup>®</sup> Select	EDITION Clione	Polystar Selec	clion	DeltaForm®
CL2 CM2 CM4 CM6 CS2		UL2/UL4 UM2/UM4 UM2/UM4 UM6*/US2 US2		XL/L L/M M/S M/S S/XS
B <i>l</i>		UL2 UL2/UL4/UM4* UM2/UM4 UM2/UM4 UM6/US2 US2		XL/L XL/L L/M M/S S/XS XS
BIL2* BIM2 BIM4 BIM6* BIS2		UL2/UL4/UM4* UM2/UM4 UM2/UM4 UM6/US2/UM2* US2		M/S M/S M/S S/XS XS
IL2 IM2 IM4 IM6 IS2		UL2/UL2/UL4 UM2/UM4 UM2/UM4 UM6/US2 US2		L/M L/M M/S M/S S/XS

## eltaForn

Ort Con Collins











### artVeneer® life

### CREATIVELY, AESTHETICALLY, EFFICIENTLY COMBINABLE WITH THE artegral® life TOOTH SERIES

artVeneer® life unique all-rounders and in combination with brilliant shade and light effects the complex set of rules of lifelike morphology and surface texture is newly defined.

The full-bodied tooth moulds of the artegral® life stay present in the artVeneer® life and, thanks to their three-dimensional, anatomical structure with multi-complex layering and the harmonious shade gradient, provide the perfect veneer.

artVeneer® life enable space-saving and efficient work. The nature-identical moulds lend acrylic veneers a natural look and integrate them into the harmonious overall picture of combined prosthetic work. The incisal back protection of the anterior veneers supports the incisal guidance, offers a contouring and modelling aid as well as an aesthetic reserve for metal edges.

### **FEATURES and BENEFITS**

- Fast, efficient veneering
- CAD/CAM-based Active Shade Technology (AST)
- Abrasion resistant
- High flexural strength
- Shock-absorbing and permanently color stable
- True-to-life fluorescence and shade effect
- Tissue-friendly, plaque-resistant
- Very easy to process and polish

### MATERIAL

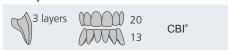
OMP-N®

### **SET-UP CONCEPT**

Tooth-to-tooth set-up

### **ANTERIOR VENEER**

Fully anatomical



### **POSTERIOR VENEER**

■ Fully anatomical, functional



- All common occlusion concepts
- Combinable 1:1 with artegral life®

### **SHADES**

16 V-Classic shades (A1-D4) and 4 Bleach shades (BL1 - BL4)





Folder REF 1092419

Mould chart REF 1092429



B-mould









14/24 15/25 16/26 17/27 34/44 35/45 36/46 37/47 8,1 7,4 11,3 10,0 8,1 7,7 11,5 11,3

14/24 15/25 16/26 17/27 Zahn 34/44 35/45 36/46 37/47 Tooth 12,7 12,5 11,1 9,7 13,3 12,5 11,3 10,2



14/24 15/25 16/26 17/27 14/27 34/44 35/45 36/46 37/47 34/4 7,6 7,0 10,8 9,6 12, 7,7 7,3 11,0 10,5 12,

17/27 14/24 15/25 16/26 17/27 Zahn 37/47 34/44 35/45 36/46 37/47 Toolh 9,6 12,0 11,7 10,6 9,2 0,5 12,6 11,9 10,8 9,2



14/24 15/25 16/26 17/27 14/24 15/25 16/26 17/27 Zohn 34/44 35/45 36/46 37/47 34/44 35/45 36/46 37/47 Tooth 6,6 5,6 10,1 9,0 11,2 11,0 10,0 8,6 7,2 7,0 10,3 10,0 11,8 11,2 10,1 8,8















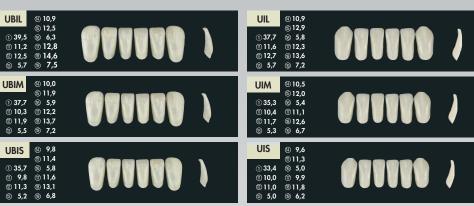




IT-mould

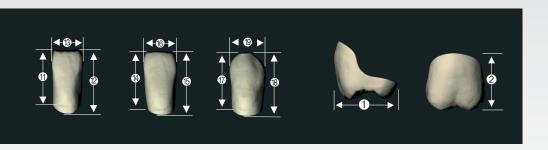
















### **Tooth cabinets**

### WELL SORTED AND DUST PROTECTED MADE OF WOOD - MADE IN GERMANY

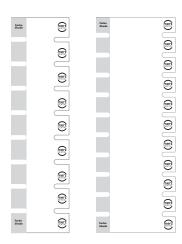
### **FEATURES and BENEFITS**

- The drawers are securely gripped and lowered at an angle when fully extended
- Sets are optimally selected right down to the last row
- The modular construction allows space-saving stackability
- The sloped handles cover the lower drawers, hence the teeth are protected from dust
- Each drawer holds 54 anterior sets or 44 posterior sets

### **DELIVERY FORM**

- 5-drawer design: (HxWxD 21 x 42 x 32 cm)REF 1090007
- 10-drawer design: (HxWxD 38 x 42 x 32 cm)REF 1090002
- 16-drawer design: (HxWxD 57 x 42 x 32 cm)REF 1090003

#### **ACCESSORIES TEETH**





#### Tooth cabinet inserts/labels

#### **WELL LABELLED**

#### **DELIVERY FORM**

#### Plain, writable tooth cabinet inserts

Anterior sets 1 pc. REF 1092435Posterior sets 1 pc. REF 1092436

#### Tooth cabinet self-adhesive labels

1 sheet of 16 pcs.

■ integral®	REF 1090951
■ artegral <sup>®</sup> life	REF 1090948
■ Polystar® Selection EDITION	REF 1090954
Polystar® Selection EDITION 2	REF 1092407
■ Polystar® HK	REF 1090565
<ul> <li>DeltaForm<sup>®</sup></li> </ul>	REF 1090955
■ artVeneer® life	REF 1092245

#### **Tooth trays**

#### MATCHED TO THE TOOTH CABINETS FOR OPTIMAL SORTING OF YOUR SETS

#### **DELIVERY FORM**

- Tray for 54 sets of anterior teeth REF 1090968
- Tray for 44 sets of posterior teeth REF 1090969
- Tray for 27 sets of anterior teeth REF 1090974 and 22 sets of posterior teeth





#### Living mould guides

#### LIVING MOULD GUIDES WITH ACRYLIC TEETH IN SHADE A3 ARE AVAILABLE IN THE FOLLOWING THREE VERSIONS:

High-quality presentation case made of aluminium
 Presentation folder with zip
 REF 1010300
 REF 1090130

Plastic tray

<u>integral®</u> REF 1010330 <u>DeltaForm®</u> REF 1010343
10 upper and 11 lower anterior sets 5 upper and 5 lower posterior sets

10 upper and 11 lower anterior sets 5 upper and 5 lower posterior 4 upper and 4 lower posterior sets

artegral® life

REF 1010333

DeltaForm® HD

REF 1010344

5 upper and 5 lower HD posterior sets

artegral life REF 1010333 5 upper and 5 lower HD posterior sets 20 upper and 13 lower anterior sets

5 upper and 5 lower posterior sets Polystar® HK REF 1010341

Polystar® Selection EDITION / REF 1010337 REF 1010337 30 upper and 15 lower anterior sets 9 upper and 9 lower posterior sets

21 upper and 9 lower anterior sets artVeneer® life REF 1010335

4 upper and 4 lower posterior sets

4 upper and 4 lower HD posterior sets

5 upper and 5 lower posterior veneer sets

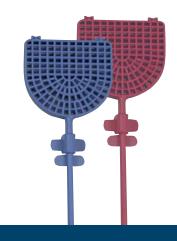
Polystar® Selection EDITION / REF 1010336
Polystar Selection EDITION 2

21 upper and 9 lower anterior sets

4 upper and 4 lower posterior sets

4 upper and 4 lower EDITION 2 posterior sets

#### **ACCESSORIES TEETH**



#### **Tooth sieve**



#### **Polar Light**

#### PRACTICAL AND DURABLE

The practical tooth sieve puts an end to timeconsuming "tooth sorting" after boiling off the wax

#### **FEATURES and BENEFITS**

- Compartments for a maximum of 14 teeth
- Temperature resistant up to 120 °C
- Secure clip closure

#### **DELIVERY FORM**

- Red REF 1030027
- Blue REF 1030028

#### TOOTH SHADE AND TOOTH CONTOUR LED LIGHT WITH 5500 K DAYLIGHT

#### **DENTAL REQUIREMENTS**

- Neutral daylight 5500 K
- Ambient light sources are eliminated
- Reliable, high-contrast color vision, contour and texture recognition
- Avoids tooth shade corrections
- Low glare for patient and user
- Identical light conditions in practice and laboratory
- Eliminates shadowing, eliminates color interference through lips as well as other sources of color in the oral cavity

#### **FEATURES and BENEFITS**

- Low acquisition and operating costs
- Battery operation with constant light output
- Small, handy, mobile
- No charger, no additional socket allocation
- Easy handling
- On/off switch can be locked during shade taking
- Immediate full light output
- 30000 hours LED life with constant light output

#### **TECHNICAL SPECIFICATIONS**

- L/W/H: 176 x 54 x 22 mm
- Weight 135 g
- 2 x AA mignon 1.5 V
- 6 x LED 5500 K
- Color rendering index Ra > 90

#### **DELIVERY FORM**

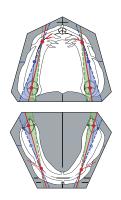
■ REF 1030260



# TOTAL PROSTHETICS IN FUNKTION

acc. to Karl-Heinz Körholz





#### **System set-up**

#### **WELL PREPARED**

The set-up of full dentures is definitely not among the easier tasks of a dental technician. Due to the edentulous situation, he can only find a few points of orientation, which can be used for the tooth set-up.

Based on the full denture concept developed by Prof. Gerber, Karl-Heinz Körholz developed a didactic approach specifically for training and continuing education. This method is called total prosthetics in function referred to as  ${\rm T}i{\rm F}^{\oplus}$  for short. It is used in many laboratories for full denture restorations, is integrated into the curriculum in numerous dental technician colleges and master classes and has established itself in the practical and master exams. Full dentures in function allow the implementation of a wide variety of occlusion concepts, from full balanced and lingualized occlusion to canine-premolar guidance.

There is no need for complex devices and instruments or using a specific type of articulator that is suitable for full dentures including set-up aids and spherical caps that are usually quite expensive. The  $TiF^{\circledast}$  method is thus not dependent on devices and does not require additional investments.

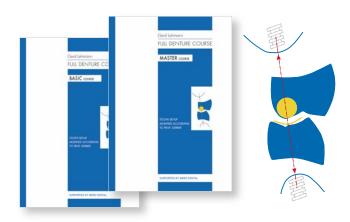
The systematic procedure ensures that the work result can be checked at any time. The set-up of each individual tooth can be determined and checked in all three dimensions by using very simple technical aids such that the technician can achieve and guarantee a consistently high quality standard in the field of full dentures in a short amount of time.

## TiF® model analysis tooth set-up

#### STEP BY STEP INSTRUCTIONS

- ✓ Tools
- ✓ Model analysis
- ✓ Setting up the teeth integral®, artegral® and artegral® life
- Control of individual tooth positions
- ✓ Static and dynamic occlusion control
- ✓ Instructions for full balanced occlusion and canine-premolar guidance
  RE

#### **SET-UP CONCEPTS**





#### **Basis & Master course brochure**

#### **Profile compass**

#### SYSTEM SETUP FULL DENTURES ACC. TO DR. GERBER

Lingualized full dentures

Step-by-step instructions for the set-up of full dentures in lingualized occlusion. Described concisely and clearly as a basic and master course by MDT Gerd Lehmann using the tooth set-up with the DeltaForm® posteriors based on the mortar-pestle principle, outlined in over 80 illustrations.

- ✓ Work documents
- ✓ Bite template
- ✓ Model analysis
- ✓ Average anterior tooth set-up
- ✓ Static posterior set-up in lingualized occlusion with the DeltaForm<sup>®</sup>
- Check individual tooth positions
- ✓ Master module with step position of posterior teeth

Basic course REF 1092212
Master course REF 1090499

#### **ESSENTIAL FOR THE MODEL ANALYSIS**

Essential for the model analysis in order to be able to transfer the course of the alveolar ridge into the area of the posteriors to the outer edge of the edentulous lower model.

The position of the largest masticating unit is determined on the basis of the alveolar ridge; this is usually the first lower molar. This procedure has been known since GYSI and was adopted by GERBER as well as for the model analysis for full dentures in function  $(TiF^{\otimes})$ .

- ✓ Full denture system set-up
- ✓ Dimensionally stable and torsion-free
- ✓ Rust-free metal parts
- ✓ Ergonomic design
- ✓ Holder with secure locking for a wide variety of pens, e.g. crayons, fineliners, normal felt-tip pens
- ✓ Supplied in a break-proof plastic case

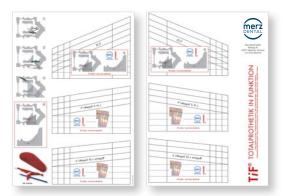




# TOTAL PROSTHETICS IN FUNKTION

acc. to Karl-Heinz Körholz





#### **Training Kit Professional**

#### **PERFECTLY EQUIPPED**

Perfectly equipped for training, courses or exams. The T*i*F<sup>®</sup> Training Kit supports in-house training courses, in preparation for the college and master exam.

Contains everything that is required for the model analysis and the tooth set-up according to TiF® the full dentures in function method. Available in a handy and sturdy case as a PROFESSIONAL set.

#### **DELIVERY FORM**

Completely equipped for training, course or exam:

- ✓ Functional models, upper and lower
- ✔ Bite key
- ✓ Angle template (REF 1090390)
- ✓ Quick guide to model analysis (REF 1030314)
- ✓ Checklist TiF®® set-up
- ✓ Course script TiF®
- ✓ Instructions TiF® with the artegral®
- ✔ Profile compass
- ✓ Fineliner box (waterproof pens in blue, red, green and black)
- ✔ Pencil
- ✓ Set square
- ✓ artegral® life sets of teeth anteriors in A3, BS, UBS and posteriors in size S
- ✔ PremEco® Line NF Wax, 5 sheets (REF 1030210)

REF 1030313

#### **Angle template**

#### **PRACTICAL HELP**

Practical help for model analysis and tooth set-up, stable, water-repellent cardboard, pre-punched for easy removal.

#### **DELIVERY FORM**

20 or 50 pieces

#### **SET-UP CONCEPTS**



# | Section | Sect

merz

### Full dentures laboratory checklist

#### **BLOCK OF 100 PAGES**

Checklist for documenting quality management from work preparation to final inspection, so that success is not left to chance.

REF 1090100

#### Full dentures data sheet

#### **BLOCK OF 100 PAGES, COLORED**

A communication aid for dentist and laboratory for the management of full dentures. Offers a rational and reliable transmission of patient information essential for the tooth set-up and its positions.

- Patient's previous wearing experience
- Bite position
- Tooth shade
- Anteriors width and length
- Proportions and position of incisors
- Aesthetic position of anteriors
- Measurements of previous dentures
- Indications of bite raise or lowering
- Tooth sets
- Occlusion concept

# artConcept®PLUS

VENEER AESTHETICS



#### artConcept®PLUS

#### AN ADDED PLUS OF VALUE AND RELIABILITY

artConcept® PLUS is a newly designed veneering system, which combines many years of experience of the previous tried and tested artConcept® with the latest technical standards.

#### artConcept® PLUS

- Contains the multilayered veneers artVeneer® life with mould, color and material identical properties, suitable for the tooth series artegral® life and the corresponding individualization and supplementary compounds, as well as a color-coordinated composite system.
- Enables a perfect combination of individual and efficient veneering technique.
- Convinces with the PLUS of adhesive properties and color stability of all coordinated system components

artVeneer® life veneers and PMMA acrylic teeth can be individualized with artConcept® PLUS veneering materials and fixed to all dental framework materials with the aid of the new artConcept® PLUS bonding system.

#### AREAS OF APPLICATION

- Total or partial tooth loss
- Loss of tooth structure

#### AREAS OF APPLICATION

#### Replacement of lost hard tooth substance by:

- Tooth-colored attachment or deposit of artVeneer<sup>®</sup> life and acrylic teeth
- Veneers for telescopic, attachment, bar and implant constructions with artVeneer® life and artConcept® PLUS system
- Bonding acrylic teeth to partial dentures with a back protection plate or pontic
- Customization of acrylic teeth, artVeneer<sup>®</sup> life and CAD/CAM restorations made of M-PM<sup>®</sup> Disc and artBloc<sup>®</sup> Temp
- Fabrication of temporary crowns and bridges
- Repairs

#### **FEATURES and BENEFITS**

- High bond strength
- High color stability
- Individual and extendable
- Aesthetic, color stable
- Excellent accuracy of fit
- Easy to polish, high plaque resistance
- Biocompatibility tested



#### VENEERING SYSTEM



#### **FURTHER COMPONENTS**

artDentine PLUS	cold-curing PMMA acrylic in tooth shades
artEnamel PLUS	cold-curing PMMA acrylic in enamel and transparent shades
artPrime PLUS	modern metal primer for the metal-acrylic bond significantly improves the adhesion between artPreOpaque <i>PLUS</i> and the metal frame.
artConnect PLUS	reliable acrylic bonder ensuring excellent bond strength between artDentine <i>PLUS</i> / artEnamel <i>PLUS</i> and highly cross-linked PMMA based veneers or denture teeth.
artPreOpaque PLUS	for priming and improving the adhesive bond between artPrime <i>PLUS</i> and artOpaque <i>PLUS</i> and is optimal when using mechanical retentions.
artOpaque PLUS	to cover metal framework.
artOpaque GUM PLUS	light-curing gingival shaded opaquer and primer all in one to cover metal frames and retentions, saving the additional application of a primer.
artVeneer wax PLUS	tooth-colored fixation wax for attaching artVeneer® life during wax-up and try-in.















Step-by-Step REF 1092370

#### artConcept®PLUS









1070472

MINIset excl. Metal Primer

MINIset incl. Metal Primer

**INTROset** 

**STARTset** 

MINISet excl. Metal Primer			REF
artDentine PLUS Polymer artDentine PLUS Liquid NT artConnect PLUS	in the corresponding shade V-Classic normal time acrylic bonder (artVeneer® life - artDentine <i>PLUS</i> )	35 g 100 ml 5 ml	1070468
artPreOpaque PLUS artOpaque PLUS	pre-opaquer in the corresponding shade V-Classic	3 g A3	1070469
MINISET incl. Metal Primer			REF
artDentine PLUS Polymer artDentine PLUS Liquid NT artPrime PLUS	in the corresponding shade V-Classic normal time metal primer (metal - artOpaque <i>PLUS</i> )	35 g 100 ml A2 5 ml	1070470
artConnect PLUS artPreOpaque PLUS artOpaque PLUS	acrylic bonder (artVeneer® life - artDentine PLUS) pre-opaquer in the corresponding shade V-Classic	5 ml 3 g 3 g _	1070471
INTROset			REF
artDentine PLUS Polymer artDentine PLUS Liquid NT artPrime PLUS artConnect PLUS	in the corresponding shade V-Classic normal time metal primer (metal - artOpaque <i>PLUS</i> ) acrylic bonder (artVeneer® life - artDentine <i>PLUS</i> )	35 g 100 ml 5 ml 5 ml	1070466
artPreOpaque PLUS artOpaque PLUS artVeneer® life artVeneer® life	pre-opaquer in the corresponding shade V-Classic upper anteriors (6 veneers) upper posteriors (8 veneers)	3 g 3 g	1070467
STADTook			

#### **STARTset**

artConcept PLUS	display tray	1 pc.
artDentine PLUS Polymer	in V-Classic shades A2, A3, A3.5, A4, B2, B3, C2, D2	à 35 g
artDentine PLUS Liquid NT	normal time	100 ml
artPrime PLUS	metal primer (metal-artOpaque PLUS)	5 ml
artConnect PLUS	acrylic bonder (artVeneer® life - artDentine PLUS)	5 ml
artPreOpaque <i>PLUS</i>	pre-opaquer	3 g
artOpaque <i>PLUS</i> O1	for the V-Classic shades A2, A3.5, B1, B2, B3, C2, C3, D2, D3, BL1, B1	.2 3 g
artOpaque <i>PLUS</i> O2	for the V-Classic shades A3, A4, B4, C4, D4	3 g
artOpaque <i>PLUS</i> O3	for the V-Classic shades A1, C1, BL3, BL4	3 g
artVeneer wax PLUS	fixation wax for artVeneer® life	45 g
Accessories	10 brush tips, 1 brush tip holder, 1 short brush, 6 mixing trays	

#### VENEERING SYSTEM













#### **Individual components**

#### Individual components

REF

#### artDentine PLUS Polymer

ſ	V-Classic shades	A1	A2	A3	A3.5	A4	B1	B2	В3	В4	C1	C2	C3	C4	D2	D3	D4
ſ	35 g REF	1010650	1010651	1010652	1010653	1010654	1010655	1010656	1010657	1010658	1010659	1010660	1010661	1010662	1010663	1010664	1010665

Bleach	Bleach shades		BL2 Bleach	BL3 Bleach	<b>BL4</b> Bleach	
35 g	REF	1010666	1010667	1010668	1010669	

#### artEnamel PLUS Polymer

V-Classic shades		shades	A1, B1, B2, C1 <b>(E1)</b>	A2, D2, D4, BL1-BL4 <b>(E2)</b>	A3, A4, B3, B4, C2 <b>(E3)</b>	A3.5, C3, C4, D3 <b>(E4)</b>	Transpa Clear (TC)
I	35 g	REF	1010701	1010702	1010703	1010704	1010700

artConcept® PLUS	display tray made of metal	1 pc.	1010706
artDentine PLUS Liquid NT	normal time	100 ml	1010670
artDentine PLUS Liquid LT	long time	100 ml	1010707
artPrime PLUS	metal primer (metal-artOpaque PLUS)	5 ml	1010713
artConnect PLUS	acrylic bonder (artVeneer® life - artDentine PLUS)	5 ml	1010679
artConnect PLUS	acrylic bonder (artVeneer® life - artDentine PLUS)	50 ml	1010682
artPreOpaque PLUS	pre-opaquer	3 g	1010705
artOpaque PLUS O1	for the V-Classic shades A2, A3.5, B1, B2, B3, C2, C3, D2, D3, BL1, BL2 $$	3 g	1010672
artOpaque PLUS O2	for the V-Classic shades A3, A4, B4, C4, D4	3 g	1010673
artOpaque PLUS O3	for the V-Classic shades A1, C1, BL3, BL4	3 g	1010674
artOpaque PLUS GUM light	paste opaquer with integrated metal primer pink light	3 g	1010677
artOpaque PLUS GUM dark	paste opaquer with integrated metal primer pink dark	3 g	1010678
artVeneer wax PLUS	fixation wax for artVeneer® life	45 g	1010697

#### **Accessories**

 Brush tips
 10 pcs. REF 1010687
 Brush tip holder
 1 pc. REF 1010686
 Mixing trays
 6 pcs. 1010685

 Short brush
 1 pc. REF 1010688
 Application syringe
 1 pc. REF 1060376

47.

# DENTURE BASE ACRYLICS



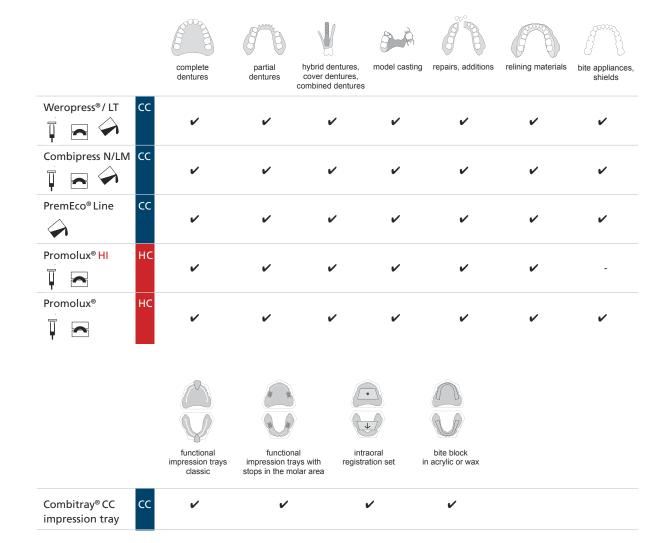


#### **Quality based on competence**

#### 100 % Made in Germany

Modern prosthetics require base acrylics that offer a natural, aesthetic appearance and are also not obvious to those within the patient's environment. The dental materials produced by Merz Dental meet these requirements. They remain stable when subject to mechanical, chemical, bacterial and thermal load, retain an accurate fit while being worn, are plaque-resistant, and are not subject to discoloration.

For 70 years, Merz Dental has been producing prosthetic acrylics based on its own cutting-edge procedures and production techniques, and using only high-grade, superior quality polymers and pigments made in Germany at its company headquarters in Lütjenburg, Schleswig-Holstein.





#### PMMA polymethyl methacrylate

# Polymethyl methacrylate (PMMA) has become part and parcel of our daily lives, and is one of the high-performance materials used for a variety of purposes. We trust PMMA in many areas of our lives, be it in the home, in technology or in medicine, for example - and these are just some of the application areas. PMMA is also used in aviation for airplane windows, in optics for lenses and optical fibres, in joint replacement as a cement for artificial hips, as well as in ophthalmology for artificial lens implants (intraocular lenses). In dentistry and dental technology, PMMA has proven its worth for over 70 years thanks to its superior elasticity and impact strength, as well as its plaque and temperature resistance and stable form.

During the manufacturing process at Merz Dental the individual production steps are continuously monitored, in order to ensure that our acrylic products are safe, properly processable and durable. For this purpose, the raw and starting materials, its processing and coloring through to the finished prosthetic acrylic are constantly checked and tested for their chemical and physico-mechanical properties. The same applies with regard to curing the required monomers so that cross-linked macromolecular network structures that are stable in the oral environment, dense and shock-absorbent can be achieved when processing prosthetic acrylics. One of the first dental materials to exhibit a cross-linked, and as a result, threedimensional network structure, was the interpenetrating polymer network (IPN for short). It was developed and launched on the market by Merz Dental in Lütjenburg.

#### **Meeting Requirements**

As a medical product, base acrylics must meet numerous requirements as laid down by internationally applicable standards and national guidelines so that during the process the user as well as the patient who will subsequently wear the acrylic denture appliance can be rest assured.

At Merz Dental, reliable resistance to wear in order to prevent discoloration and impurities as well as high standards in terms of chemical, physical and mechanical properties are always monitored and tested on an ongoing basis throughout the entire production process. Prosthetic acrylics are worn in the oral cavity, which is why they must be biocompatible. Merz Dental proves this for each of its prosthetic acrylics based on internationally recognised testing using cytotoxicity assays.

Essential requirements of **EN ISO 20795-1**, the applicable standard for prosthetic acrylics, include fracture toughness, elastic modulus, residual monomer content as well as water sorption in the oral cavity. The prosthetic acrylics produced by Merz Dental meet these requirements.

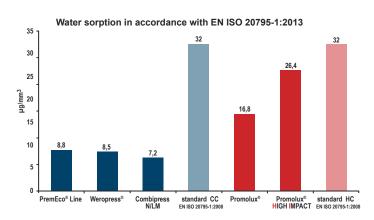


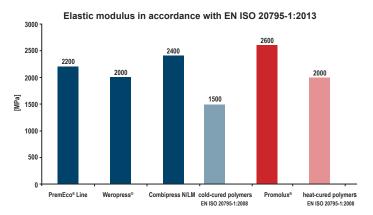
#### DENTURE BASE ACRYLICS

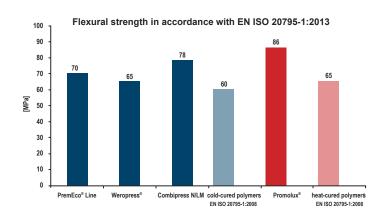




#### For daily use







Prosthetic acrylics from Merz Dental also support efficient, reliable and simple processing. This applies even to the simplest of items, such as droppers, nozzles and measuring cups for monomer and polymer.

- Reliable and simple to measure powder-liquid system
- Targeted, economical application
- Efficient shade communication based on acrylic shade tabs
- All prosthetic acrylics from Merz Dental are compatible in terms of shade and can be processed using commercially-available, cold-curing MMA polymers for the purposes of repair and addition
- Customized shades as of 80 kg purchase quantity are available



#### **COLD-CURING POLYMERS**





biocompatibility tested

#### Weropress® / Weropress® LT

#### THE ALL-ROUNDER



Color stable and precision-fit cold-curing prosthetic acrylics of outstanding quality. Due to its unique polymer and monomer formulation it is suitable for all indications and processes within the injection, press and pouring method.

**Weropress® LT** Monomer is specially developed for a longer flow phase at higher temperatures. It extends the processing time of the Weropress® denture base acrylic by 2-3 min at temperatures around 21-23 °C. The specifically controlled polymerization process makes the acrylic easier to process, especially in warmer summer laboratory conditions.

\*dark pink-opaque \*\*dark pink-opaque, veined \*\*\*pink-bluish

REF	pink	pink veined	pink3	H-pink	L1	
100 g	1020045	1025014	1020032	1020039	-	
<b>1000 g</b> 1025050		1025051	1025057	1025052	1025038	
12 kg	1020092	1020093	-	-	-	

#### AREAS OF APPLICATION

- Complete dentures, partial dentures
- Hybrid dentures, cover dentures, combined dentures
- Model casting
- Repairs, additions, relining materials
- Bite appliances, shields

#### **FEATURES and BENEFITS**

- High flexural strength tolerates large undercuts such as maxillary tuber during devesting
- Excellent polishing features
- Superior color stability
- High plaque-resistance
- No late discoloring
- Biocompatibility tested

nink 22 % trans

Cadmium-free

							pilik 33 /6 trails			
REF	BD Load pink	BDLoad dark pink	clear	C34*	C34**	CS41***	parent veined	V3	V5	V10
100 g	1025034	1020031	1020048	1020046	-	1020055	1020087	-	-	-
1000 g	1025056	1025058	1025053	1025054	1025041	1025055	1025042	1025039	1025040	1025043
12 kg	_	-	-	1020094	-	-	-	-	-	-

\*dark pink-opaque, veined \*\*dark pink-opaque \*\*\*pink-bluish

 Weropress®
 100 ml
 REF 1020047

 Weropress®
 1000 ml
 REF 1020086

 Weropress®LT
 100 ml
 REF 1020025

 Weropress®LT
 1000 ml
 REF 1020026



Shade tab REF 1090209

#### **DENTURE BASE ACRYLICS**





biocompatibility tested

#### **Combipress N/LM**

#### THE SPECIALIST FOR COMBINED AND HYBRID DENTURES



Combipress N normal curing time

Combipress LM long modelling phase

Especially developed for combined and hybrid restorations, this color stable cold-curing denture base material ensures an efficient and economical process. The long pouring time of 3 minutes ensures certainty and flexibility when processing more than three acrylic saddles. Thanks to the elongated modelling phase (LM) controlled by the polymer extensive restorations can be processed at the same time. Discoloration resistance, high final hardness and mucous membrane compatibility are further outstanding features.

#### AREAS OF APPLICATION

- Partial dentures
- Hybrid dentures, cover dentures, combined dentures
- Model casting
- Repairs, additions, relining materials
- Bite appliances, shields

#### **FEATURES and BENEFITS**

- Reliable and simple to measure powder-liquid system
- Excellent flow characteristics with a time-controllable transition to modelling phase (N and LM)
- Safe stability enables a simple processing of several saddles
- High resilience
- Quick achievement of high final hardness with little rest monomer content and mucous membrane compatibility
- Excellent polishing features
- Highest color stability
- Colors are coordinated with all Merz Dental denture base materials
- High plaque resistance thanks to cutting-edge PMMA formulation
- No late discoloring thanks to advanced catalyst system

mink 22 0/ trans

- Biocompatibility tested
- Cadmium-free

REF		pink	pink veined	BD Load pink	clear	C34*	parent veined	pink trans- parent veined
Combipress N	100 g	REF 1020704	REF 1025015	REF 1020706	REF 1021406	REF 1020703	REF 1020705	-
Combipress N	1000 g	REF 1025105	REF 1025106	REF 1025109	REF 1025107	REF 1025108	REF 1025110	-
Combipress N	12 kg	REF 1020095	REF 1020096	-	-	-	-	-
Combipress LM	100 g	REF 1021404	REF 1025016	-	REF 1021402	-	REF 1021408	REF 1021407
Combipress LM	1000 g	REF 1025100	REF 1025101	-	REF 1025102	-	REF 1025104	REF 1025103

 Combipress N/LM
 100 ml
 REF 1021405

 Combipress N/LM
 500 ml
 REF 1022809

 Combipress N/LM
 1000 ml
 REF 1022810

\*dark pink-opaque, veined



Shade tab **REF 1090209** 



#### **COLD- / HEAT-CURING POLYMERS**





biocompatibility tested

#### PremEco® Line

#### THE SPECIALIST FOR PROSTHETIC CASTING



Especially developed prosthetic PMMA acrylic for the pouring method for rational processing of partial and complete acrylic prosthetics. The excellent pouring property is especially adjusted for the silicone and gel investment in conjunction with the PremEco® Line casting flask and the PremEco® LineColor System for individual and natural colored characterization. Color stable and compatible with the mucosa with proven biocompatibility.

#### AREAS OF APPLICATION

- Complete dentures
- Partial dentures
- Hybrid dentures, cover dentures, combined dentures





#### **FEATURES and BENEFITS**

- Saves time, reliable and simple dosage and processing
- Especially suited for casting in gel, hydrocolloid or silicone duplication moulds
- Excellent flow
- Individual colorization with the Prosthetic Color System (PCS)
- Colors co-ordinated with the Merz Dental denture base materials
- Extremely robust
- Excellent fit accuracy
- Easy to polish
- High plaque-resistance thanks to most modern PMMAformulation
- No late discoloring thanks to advanced catalyst system
- Biocompatibility tested
- Cadmium-free

REF	pink	pink-opaque	clear	C34*	C34**	pink trans- parent veined	S34	V5
100 g	REF 1030086	REF 1030087	REF 1030064	REF 1030088	REF 1030090	REF 1030058	-	
1000 g	REF 1025112	REF 1025113	REF 1025114	REF 1025115	REF 1025116	REF 1025117	REF 1025118	REF 1025136

\*light pink-opaque, veined \*\*dark pink-opaque, veined

**100 ml** REF 1030089 **1000 ml** REF 1030073



Shade tab REF 1090208



Manufactured from cast plastic PremEco® Line and PremEco® Line Prosthetic Color System.

#### **DENTURE BASE ACRYLICS**







biocompatibility tested

#### **Promolux®**

#### THE CLASSIC OPTION



Thanks to continued developments in mechanical and physical properties as well as the paste consistency of the acrylic material, Promolux® can be processed reliably, easily and for a variety of applications regardless of the system in question using the conventional flask and injection moulding procedures.

#### AREAS OF APPLICATION

- Complete dentures
- Partial dentures
- Hybrid dentures, cover dentures, combined dentures
- Relining materials
- Bite appliances, shields

#### **FEATURES and BENEFITS**

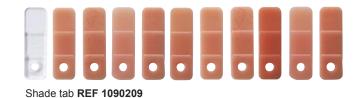
- Easy and simple to measure powder-liquid system
- Can be processed with the injection and injectionpressing moulding method
- Easy processing
- Extremely robust
- Easy to polish
- High final hardness
- Color stability
- Colors co-ordinated with the Merz Dental denture base materials
- High plaque-resistance thanks to most modern PMMAformulation
- No late discoloring thanks to advanced catalyst system
- Biocompatibility tested
- Cadmium-free

REF	pink	pink veined	H-pink
100 g	REF 1020007	REF 1025013	REF 1020038
1000 g	REF 1025125	REF 1025126	REF 1025130
12 kg	REF 1020090	REF 1020091	-

REF	clear	C34*	CS41**	parent veined	p	V3	V5	V10
100 g	REF 1025004	REF 1020009	REF 1020015	REF 1020019	REF 1020002	-	REF 1020034	-
1000 g	REF 1025127	REF 1025129	REF 1025128	REF 1025134	REF 1025135	REF 1025131	REF 1025132	REF 1025133

\*dark pink-opaque, veined \*\*pink-bluish

100 ml	REF 1020008
500 ml	REF 1020036
1000 ml	REF 1025003



**CE** 0482

#### **HEAT-CURING POLYMERS**







#### **Promolux® High Impact**

#### FOR HIGHEST DEMANDS



Denture base acrylic for partial, full and implant supported prosthetics. Complies with all requirements for High Impact acrylics according to EN ISO 20795-1 type 1 class 1.

#### AREAS OF APPLICATION

- Complete dentures
- Partial dentures
- Hybrid dentures, cover dentures, combined dentures
- Relining materials
- Bite appliances, shields

#### **FEATURES and BENEFITS**

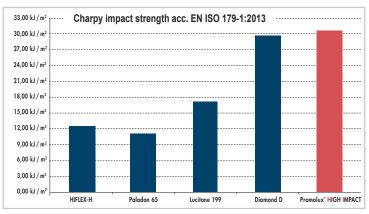
- 300% higher impact resistance compared to conventional heat-curing acrylics
- 200% higher impact strength compared to conventional heat-curing acrylics
- Residual monomer < 2%
- Free from phthalate
- Easy handling
- For the injection and press technique
- Usual application and processing
- Easy to polish
- Colors coordinated with the Merz Dental denture base materials
- Color stable thanks to advanced catalyst system
- High plaque-resistance thanks to most modern PMMAformulation
- Biocompatibility tested
- For additions, relineable
- Cadmium-free colors



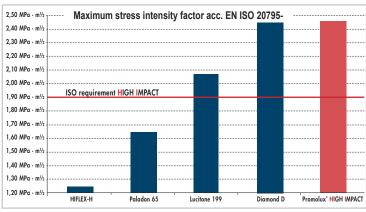


#### **DENTURE BASE ACRYLICS**

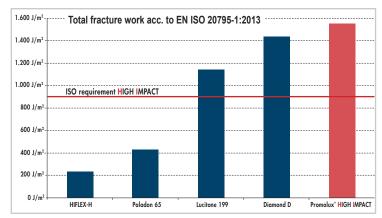
#### **Merz Dental Research & Development**



Promolux® HIGH IMPACT is extremely tough to sudden dynamic stresses e.g. when denture is dropped during cleaning. Exceeds expectations of patient and dentist.



Maximum stress intensity factor - energy required to generate fracture via crack extensions - Promolux  $^{\otimes}$  HIGH IMPACT more than 2,46 MPa-m½



Total fracture work - energy and time required over a prolonged load to fracture the material Promolux® HIGH IMPACT more than 1500 J/m²

## PremEco® Line

Prosthetics Color System



#### PROCESSING SYSTEMS





#### **Prosthetics Color System**

Superb-quality and particularly long-lasting shade characterization of acrylic prosthetics and saddles comes from within and is thus superior to stains. Based on cold-curing PMMA the Prosthetic Color System is especially suited for laying the staining. Durability and color stability are of benefit in addition to the simple processing. For shade customization of artificially replicated gingiva, standard and intensive shades are provided that offer a natural appearance and can be mixed together as required.

#### AREAS OF APPLICATION

Individual shade characterization of the artificial gingival and full dentures

Intensive colors

opal -

topaz

ruby

sapphire

# Standard colors shell coral anemone



#### **FEATURES and BENEFITS**

- Due to the chemically homogeneous MMA base, strong bond with PremEco<sup>®</sup> Line denture base acrylic
- Easy processing due to direct application in the duplicating mould (gel, hydrocolloid or silicone)
- Mould and shade design
- Natural color effect through layering technique
- Extremely easy to polish
- Color stable
- Small variety in order to fulfil the highest aesthetic demands
- Plaque resistant
- Cadmium-free

REF 1030074 PremEco® Line Prosthetics Color Syste	m Set 1
REF 1030019 PremEco® Line Prosthetics Color Syste	m Set 2
REF 1030082 PremEco® Line PCS Refill shell	100 g
REF 1030083 PremEco® Line PCS Refill coral	100 g
REF 1030085 PremEco® Line PCS Refill anemone	100 g
REF 1030014 PremEco® Line PCS Refill shell	35 g
REF 1030015 PremEco® Line PCS Refill coral	35 g
REF 1030016 PremEco® Line PCS Refill anemone	35 g
REF 1030010 PremEco® Line PCS Refill opal	8 g
REF 1030011 PremEco® Line PCS Refill topaz	8 g
REF 1030012 PremEco® Line PCS Refill ruby	8 g
REF 1030013 PremEco® Line PCS Refill sapphire	8 g
REF 1030007 PremEco Line PCS Refill anemone	8 g
REF 1030008 PremEco Line PCS Refill shell	8 g
REF 1030009 PremEco Line PCS Refill coral	8 q



Coloring Guide REF 1090965



#### **SET-UP WAX**







#### PremEco® Line NF

#### **SET-UP WAX**

Temperature-resistant modelling wax for all types of dental prosthetics related work with high softening temperature and inconspicuous coloring for the wax try-in.

#### AREAS OF APPLICATION

Wax set-up of acrylic teeth for all types of work in dental prosthetics related, e.g. for partial and full dentures, cast model saddles, immediate and interim dentures, additions

#### **FEATURES and BENEFITS**

- Safely fixes acrylic teeth in place by means of microcrystalline wax
- Can be used during any season
- Due to a softening temperature of more than 52 °C, it is especially suited for longer try-ins
- No distorsion when using duplicating gels
- High strength
- Minimal resetting when cooling down
- Minimal solidification contraction
- Minimal resetting after plastic deformation
- Can be shaped by means of cutters and grinders
- Natural color

#### **COLOR**

pink

#### **DELIVERY FORM**

95 g (approx. 5 sheets) REF 1030210
 500 g (approx. 22 sheets) REF 1030212
 2500 g (approx.120 sheets) REF 1030213

#### artWax

#### **SET-UP WAX**

Temperature-resistant, tough four-season set-up wax with a high softening temperature for all types of dental prosthetics related work.

#### AREAS OF APPLICATION

Wax set-up of acrylic teeth for all types of work in dental prosthetics related, e.g. for partial and full dentures, cast model saddles, immediate and interim dentures, additions

#### **FEATURES and BENEFITS**

- Safely fixes acrylic teeth in place
- Can be used all-season
- Especially suitable for long fitting and the use of duplicating gel
- Lowest spring-back (flow), high accuracy of form and dimension
- Low solidification contraction, low distortion after cooling
- Precise, clean modelling
- Very good polishing properties

#### COLOR

Natural pink color corresponding to the hot and cold curing Merz Dental denture base acrylics Promolux®, Weropress®, Combipress and PremEco® Line.

#### **DELIVERY FORM**

■ 500 g (approx. 24 sheets) REF 1030252



#### ALGINATE ISOLATING SOLUTION / PRECISION GEL





#### PremEco® Line

#### PremEco® Line NF

#### **ALGINATE ISOLATING SOLUTION**

This special isolating material for plaster against denture acrylic is suited for processing hot-curing and cold-curing polymers. Due to its extremely spreadable consistency, it is very easy to apply and adheres perfectly to the plaster.

#### AREAS OF APPLICATION

For all set-up work, relines, repairs and additions of partial and full dentures, saddles of model cast dentures, removable saddles of combined dentures, immediate and temporary dentures.

#### **FEATURES and BENEFITS**

- Liquid, formaldehyde-free mixture of alginate, water and preservatives
- Highly spreadable consistency
- Easy application on the plaster model
- Excess material is not bound and can be easily removed
- Extremely smooth and thin isolating layer
- Clear visual control due to high-gloss film
- Denture can be easily removed after polymerization

#### **COLOR**

slightly violet

#### **DELIVERY FORM**

■ 1000 ml REF 1030077

#### **PRECISION GEL**

Highly precise, reversible duplicating material based on hydrocolloid agar-agar, made from high-quality natural products, for partial and full denture casting, model casting as well as for duplicating dental plaster, gypsum-based and phosphate-bonded investment material.

#### AREAS OF APPLICATION

Particularly suited for processing acrylic dentures in the pouring technique, for the construction of investment models for partial dentures and for the duplication of plaster models.

#### FEATURES and BENEFITS

- For high quality and reversible duplicating
- Elastic duplicating material for dental plaster, gypsum-based investments and phosphate-bonded investments
- Thin-flowing, true to detail and volume with a very smooth finish and clean surface
- Particularly high strength during the polymerization of denture acrylics
- Possesses high elasticity and volumetric strength
- Direct resilience for trouble-free deflasking
- Excellent visual control of contours thanks to green-opaque color
- True to volume
- Can be melted in the microwave

#### **COLOR**

green

#### **DELIVERY FORM**

6 kg
 REF 1030097



#### **Swiss Jet**

#### **ALL-IN-ONE-FLASK**

The Swiss Jet flask for the injection and pack-press method is an all-rounder. The corrosion resistant flask, which closes precisely due to the cone fit and which is designed for the highest continuous stresses, is easy to handle and does not require any additional installations such as compressed air and a special water connection.

#### AREAS OF APPLICATION

- Completion of partial and full dentures
- Telescopic and cover dentures
- Bite splints of all types

#### **FEATURES and BENEFITS**

- No additional installations required, hydraulic press is sufficient
- For heat-curing polymers, e.g. Merz Dental Promolux®
- For cold-curing polymers, e.g. Merz Dental Weropress®
- For vinyl polymer denture base materials, e.g. Luxene®
- Due to triangular shape, optimum height width-depth ratio
- Extremely wide and high models can also be embedded easily
- No bracket required, screw connection takes place under pressure in the hydraulic press
- With 100 bar = 40 kN pressure achieving the optimum compression of acrylic
- Precision locking
- Corrosion-resistant

#### **DELIVERY FORM**

 A combined injection and pack-press flask REF 1030095



"Swiss Jet impresses with the simplest handling and processing of heat- and cold-curing acrylics with maximum compression and minimal bite elevation."

Max Bosshart, MDT, Switzerland



Step-by-Step REF 1090236





#### PremEco® Line

#### **POURING FLASK**

Robust, distortion-free duplicating flask used with the pourable casting technique to produce partial and full acrylic dentures, model cast dentures, double-crown and cover dentures, as well as for all types of bite splints.

#### AREAS OF APPLICATION

For rational production of acrylic dentures due to gel-hydrocolloid investment with fast processing and finishing following polymerization. Suitable for methylmethacrylate-based denture acrylics.

#### **DELIVERY FORM**

■ Normal, Ø 110 mm	REF 1030078
■ Large, Ø 125 mm	REF 1030079
■ Channel cutter, Ø 8 mm	REF 1030080
■ Replacement screw	REF 1030084

# 

Step-by-Step REF 1090298

#### **FEATURES and BENEFITS**

- Opening and closing in seconds thanks to handy, precise knurled screws
- Flask cover and upper part made of torsion-resistant hard plastic
- Continuous markings for easy assembly of the flask parts
- Recess on the underside of the flask for magnets, no lateral offset when repositioning the models (no pseudo-displacement of the center of the model, no pseudo-bite elevation)
- Flushable lower part of the flask made of metal for better supply and dissipation of thermal energy
- Optimal positioning of the gel filling hole matched to the filling spout of the automatic duplicating gel machine
- Stabilization bars and retention holes for the duplicating gel when opening the flask and removing the model as well as for securing the occlusion against the polymerization pressure
- Large, parallel filling holes for a controlled, fast, mould-filling pouring process
- Parallel filling reservoir controls the polymerization process in the flask
- High level of leak-tightness of the flask due to milled grooves and O-ring
- No adhesion of the denture acrylics to the flask parts
- Easy to clean

#### TRAY MATERIAL





#### Combitray CC 😂 🥝





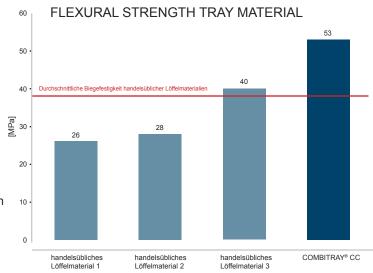
#### POWDER-LIQUID-BASED TRAY MATERIAL, **SELF-CURING**

Dimensionally-stable tray material that offers flexural strength with a short doughing time for the fabrication of custom impression trays, base plates and intraoral registration templates. Does not contain amines and separates from plaster by itself thanks to a cutting-edge chemical formulation.

#### **FEATURES and BENEFITS**

- Short mixing and doughing time
- Long processing interval, 4 min
- Does not stick to hands and is not greasy
- Simple and reliable moulding and adaption
- No unpleasant odours, does not contain amines
- Can be added onto with identical material
- Easily removable from the model following curing, separates from plaster models by itself
- High flexural strength, comparable products tolerate an average of 39 MPa, Combitray CC supports 53 MPa, which corresponds to material strength of approx. 5 kg/mm<sup>2</sup>
- Low shrinkage, dimensionally stable
- No smearing when milling

	pink	white
125 g	REF 1020101	REF 1020102
1250 g	REF 1020103	REF 1020104
50 ml	REF 1020100	
500 ml	REF 1020105	



#### THERMOPLASTIC IMPRESSION MATERIAL



#### **BD**Impress



VIDEO BDImpress®

#### BIOCOMPATIBLE, THERMOPLASTIC IMPRESSION MATERIAL

#### AREAS OF APPLICATION

For bite registrations, anterior bite splints, individual impression trays, bleaching trays, border reconstruction of impressions, border moulding on functional impressions, orthodontic appliances.

#### **FEATURES and BENEFITS**

- Takes less than one minute to use
- Dimensionally stable
- Can be finished directly in the mouth
- Smooth, glossy surface requires no polishing
- No mixing or chemical polimerization
- 5 minute bench set, or immediate setting in cold water
- Odorless and reusable
- High levels of accuracy and precise detail
- Quick production of base plates
- Translucent white
- Individually dosed

With a dip in hot water, <sup>BD</sup>Impress® softens to a pliable putty, which hardens into an unbreakable thermoplastic resin. The biocompatible <sup>BD</sup>Impress® can be reshaped as many times as it takes to achieve the perfect impression or bite registration.

#### **DELIVERY FORM**

■ 200 g REF 1032126















#### **TECHNOLOGY**



#### DIGITAL SOLUTIONS

#### Subtractive and additive manufacturing





# mµILLUSION

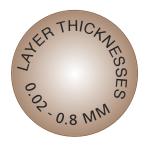
Color and Micro-Layering Technique



**Exclusive Edition** 

#### mµILLUSION









VIDEO Characterization posterior crown

VIDEO Characterization anterior crown

With the new paste-like, opalescent and fluorescent mulLLUSION stains mulLLUSION Color, the layering materials mulLLUSION Paste and glaze materials for coloring and structuring, Merz Dental is now expanding its attractive M-ZR Disc zirconium dioxide range to new dimensions in your zirconium dioxide and lithium disilicate restorations - monolithic or in micro-layer technique.

The impressive *mµILLUSION* range with 14 gingiva shades, among others, covers the complete color spectrum for all tooth and gingiva designs.

The unique consistency and microfine particle structure enables a particularly pleasant and simple handling of spatially stable and precise application of high three-dimensional stability and impresses with its extraordinarily high opacity.

Even with layer thicknesses of 0.02 mm for the stains  $^{m\mu}ILLUSION$  Color and from 0.2 mm to 0.8 mm for the layering materials  $^{m\mu}ILLUSION$  Paste, minimally invasive layers with a three-dimensional nature-identical depth effect, mould finesse, morphology and individual surface structures are realisable using the cut-back method.

Highly aesthetic results, comparable to layered restorations, can be achieved quickly and easily with just one firing. The final color result can be seen as soon as it is applied, remains unchanged during and after firing and thus offers visual control at all times.

#### AREAS OF APPLICATION

mulLLUSION Color und Paste for the production and characterization of crowns & bridges made of:

- Monolithic zirconium dioxide (Y-TZP)
- Metal ceramic
- Pressed ceramic
- Lithium disilicate (monolithic)
- Lithium disilicate (veneered)
- Zirconium dioxide (Y-TZP), veneered
- Particularly suitable for the characterization of monolithic anterior crowns and bridges using the Cut-back / Color and Micro-Layering Technique



#### COLOR AND MICRO LAYERING TECHNIQUE



#### INDIVIDUALITY UNLIMITED

multusion supports economical storage of CAD/CAM blanks. It is also possible to adjust the original color by up to three shades lighter or darker. This means that different colors and thus different characteristics of teeth of all ages can be created from the same framework material.

Whether youthful or age-appropriate, the color design of the gingiva represents a major challenge. With  $^{m\mu}ILLUSION$  Gingiva Color and Paste there are no limits to the design. Whether marginal or attached gingiva,  $^{m\mu}ILLUSION$  has the properties to imitate the individuality of a natural pink aesthetic with little effort.

#### MONOLITHIC CROWNS AND BRIDGES

Monolithic crowns and bridges made of multilayer zirconium dioxide ceramics show a static incisal-dentine gradient due to the product-specific vertical color layers. To this day, individual features are created, especially in the anterior region, using additional ceramic veneers or imitated by using stains, whereby aesthetic compromises have to be made with the pure staining. Thanks to the unique consistency of the <code>mullLlusion</code> Color and Paste ceramics, individual micro-layers are now also possible in the anterior region. There is no need for layering with zirconium veneering ceramics.

The unique consistency and particle distribution of the <code>mpILLUSION</code> Paste ceramic enables its spatially stable and precise application. The high three-dimensional stability and the color-fast ceramic structure of the pastes make work easier and enable visual checks at all times. The special manufacturing process and the complex quality assurance measures in the production of <code>mpILLUSION</code> Color and Paste guarantee a dense, homogeneous surface and all the advantages of a modern dental ceramic in terms of biocompatibility, physical and chemical properties and wear performance



#### mµILLUSION



#### 3 for all applications

For the processing of monolithic materials, it is important to have, in addition to stains, a paste-like ceramic that imitates incomparably the surface texture, luminescence and opalescence of tooth enamel.

With three sets for each method, Merz Dental offers a strong selection of colors and pastes. A highlight is the gingiva set, with its internationally unique range of gingiva colors and pastes will inspire every user.



#### Basic Set

an impressive large variety

#### Professional Set

a well-thought-out system of stains and pastes for the full range of all types of monolithic or ceramic restorations

#### Gingiva Set

for imitating the natural gingiva

mulLLUSION Color und Paste gingiva shades are unique as they enable the design of the gingiva parts of monolithic or ceramic restorations whenever soft tissue is missing, for example when working on implant-supported restorations or bridges.

The new  $^{m\mu}ILLUSION$  Paste gingiva shades in combination with the  $^{m\mu}ILLUSION$  Color gingiva shades cover the entire shade spectrum of the marginal gingiva, the attached gingiva, up to the alveolar mucosa in the fold area.

# **COLOR AND MICRO-LAYERING TECHNIQUE**



# mμ ILLUSION Sets

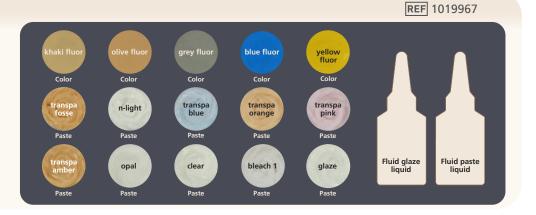
# Basic Set

- 4 x Color Body à 4 g
- 2 x Color Enamel à 3 g
- 5 x Color Effect à 3 g
- 1 x Paste Enamel 4 g
- 1 x Paste Dentine 4 g
- 1 x Glasur glaze fluor 5 g
- 2 x Liquid à 25 ml
- Brushes no. 2 / no. 4



## **Professional Set**

- 1 x Color Enamel à 3 g
- 4 x Color Effect à 3 g
- 5 x Paste Enamel à 4 g
- 1 x Paste Character 4 g
- 4 x Paste Transpa à 4 g
- 2 x Liquid à 25 ml
- Brushes no. 2 / no. 4



# Gingiva Set

- 5 x Color Gingiva à 3 g
- 9 x Paste Gingiva à 4 g
- 1 x Glasur glaze 5 g
- 2 x Liquid à 25 ml
- Brushes no. 2 / no. 4

#### **REF** 1019966 coral red intensive rose rose pink Color GUM Color GUM Color GUM Color GUM Color GUM shell flamingo orange Paste GUM Paste GUM Paste GUM Fluid glaze liquid Fluid paste liquid neutral C34 glaze Paste GUM Paste GUM

# mµILLUSION



# <sup>mμ</sup>**ILLUSION** Color and Paste

#### **FEATURES and BENEFITS**

#### mulLUSION Color

- characterizes the horizontal color and transparency gradations of multilayer blanks
- provides lithium disilicates with shades like natural teeth
- creates light dynamics that can otherwise only be achieved with layered crowns and bridges

#### m<sup>µ</sup> ILLUSION Paste

- for homogeneous surfaces and sculptural depth effect
- provides same results before and after fixing, thanks to low shrinkage and color stability
- for micro-layering in the cut-back technique, structures from 0.2 mm to 0.8 mm are realizable with one firing

## mulLLUSION Gingiva Color and Paste

- unique and exclusive assortment
- for the natural appearance of gums through individual design

#### MATERIAL FEATURES

#### mullLUSION Color and Paste

- provides same results before and after fixing, thanks to low shrinkage and color stability
- for precise and stable application with very good moulding properties
- reduce the storage of CAD/CAM blanks, the original color can be corrected by up to three shades lighter or darker



Brochure REF 1092466



Color guide REF 1092457

# COLOR AND MICRO LAYERING TECHNIQUE









	Color		REF
	A fluor	4 g	1019910
dy	B fluor	4 g	1019911
Во	C fluor	4 g	1019912
	D fluor	4 g	1019913
76	white fluor	3 g	1019914
Ename	pigeon blue fluor	3 g	1019917
E	blue fluor	3 g	1019923
	orange fluor	3 g	1019915
	smoke fluor	3 g	1019916
	red brown fluor	3 g	1019918
4.	light orange fluor	3 g	1019919
ffec	khaki fluor	3 g	1019920
F	olive fluor	3 g	1019921
	grey fluor	3 g	1019922
	dark brown fluor	3 g	1019924
	yellow fluor	3 g	1019925
	GUM red purple	3 g	1019926
la I	GUM rose	3 g	1019927
ingiva	GUM rose pink	3 g	1019928
G	GUM coral red intensive	3 g	1019930
	GUM red intensive	3 g	1019931
Glasur	glaze fluor	5 g 7 g	1019953 1019959
	glaze	5 g	1019954
Fluid	glaze liquid	25 ml	1019955
FΙ	paste liquid	25 ml	1019956
Brushes	Brush no. 2 2.2 mm, 8 mm	1 X	1019957
Bru	Brush no. 4 5.4 mm, 9 mm	1 x ~nttusion	1019958

	Paste		REF
	incisal 2	4 g	1019932
	n-light	4 g	1019935
Enamel	transpa blue	4 g	1019936
Ena	clear	4 g	1019941
	bleach 1	4 g	1019942
	glaze	4 g	1019943
De	ntine A2	4 g	1019933
Ch	<b>aracter</b> transpa fosse	4 g	1019934
	GUM violet	4 g	1019944
	GUM brown pink	4 g	1019945
	GUM orange	4 g	1019946
ë	GUM flamingo	4 g	1019947
Gingiva	GUM shell	4 g	1019948
B	GUM dark pink	4 g	1019949
	GUM dark brown	4 g	1019950
	GUM neutral	4 g	1019951
	GUM C34	4 g	1019952
	transpa orange	4 g	1019937
anspa	transpa pink	4 g	1019938
Tran	transpa amber	4 g	1019939
	opal	4 g	1019940



# M-WAX

CAD / CAM WAX BLANKS

FOR THE CAST TECHNOLOGY





#### MADE OF SPECIAL WAX IN HIGHEST QUALITY

The M-WAX discs have been especially adjusted to the dental CAD/CAM technique and fulfil the special demands of dental technicians while meeting the technical milling process requirements of embeddable objects for casting, pressing and overpressing techniques.

100% residue-free burnout special wax guarantees excellent millability and perfect, clean and smooth cast surfaces.

The optimized features of the wax allow also the manufacture of highly delicate forms. Any shrinkage or distortion of the milled object is prevented. The temperature stable, investment compatible and volume stable special wax ensures absolutely exact accuracy of marginal finishings and fits.

The special wax compositions of the two M-WAX color and hardness options (from hard to medium hard) have been tailored to the specific applications and offer different advantages, such as optimal visual contrast and specific required properties adjusted to their individual indications.

Particularly suited for embeddable CAD/CAM based model-casted constructions

Color variation: **green** Strength: **hard** 

special wax with increased fracture resistance due to resin reinforcement

Particularly suited for embeddable CAD/CAM based crowns and bridges made of wax for the casting, pressing and overpressing techniques

Color variation: **blue** Strength: medium **hard** 

special wax

## **FEATURES and BENEFITS**

- Different colors for different applications
- Good contrast to the model material
- Burn-out milling blank for the CAD/CAM technique
- Possibilities of virtual modelling of model casting frameworks, crowns and bridges and their implementation in the casting technique
- Burns-out without residue
- Smooth surfaces after processing
- The mechanical properties of the wax enable the production of detailed moulds
- No shrinkage or distortion of the wax object
- Exact marginal fits
- For diagnostic wax-ups
- Combination of classic craftsmanship and digital workflows

Dimension	Color	Strength	REF
Ø 98.5 mm x 20 mm	green	hard	1019306
Ø 98.5 mm x 25 mm	green	hard	1019305
Ø 98.5 mm x 14 mm	blue	medium hard	1019304
Ø 98.5 mm x 20 mm	blue	medium hard	1019303

# PEEK BIOSOLUTION®

# BIOBALANCE IN PROSTHETICS







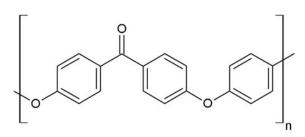












**EU MEDICAL DEVICE CLASS IIb** 

# PEEK BIOSOLUTION®

# POLYETHER ETHER KETONE THE INTELLIGENT HIGH-PERFORMANCE POLYMER

# WORLDWIDE THE FIRST APPROVED DENTAL PEEK DISC OF MEDICAL DEVICE CLASS IIB

FOR DEFINITIVE FIXED CONSTRUCTIONS SUCH AS BAR CONSTRUCTIONS AND SUBGINGIVAL PLACED HYBRID ABUTMENTS AND CERVICAL GINGIVA FORMERS.

PEEK BioSolution® with its ideal combination of biocompatibility and maximum loading capacity is the premium solution for the biological balance of denture base and restorative material. The proven medical-grade-quality used as reliable surgical endoprosthetics material is currently the most interesting dental CAD/CAM material for manufacturing high-end medical device class products. PEEK BioSolution® is manufactured by an industrially controlled production process with consistently high quality made in Germany.

#### AREAS OF APPLICATION

- Hybrid abutments
- Gingiva formers
- Bar constructions
- Tertiary constructions
- Telescopic crowns
- Crowns and bridges
- Transversal connectors
- Occlusal splints
- Denture bases



CONSTANT QUALITY CONTROL, SAFETY AND STABILITY DURING PRODUCTION PROCESS







Biocompatibility tested

# IDEAL PHYSICAL AND CHEMICAL MATERIAL CHARACTERISTICS

- The future number one choice of metal-free prosthetic material due to its human bone-like elasticity and hightenacity in combination with almost non-existent material fatigue
- Polyether ether ketone is biocompatible, wear-resistant and at the same time elastic like the human bone
- The optimal physical properties of PEEK allow about the identical construction dimensions as with metal materials
- Controlled industrial technical long-term temper process guarantees minimal material tension and best homogeneous crystallization
- Extremely high flexural strength and wear resistance
- Excellent chewing and better wearing comfort opposed to metal constructions
- Individualizable by using well-established veneer and composite materials incl. artVeneer® / artVeneer® life veneer shells in conjunction with the artConcept® PLUS Veneering System
- Sterilizable (Validated method in accordance with EN ISO 17665

#### WEARING TIME WITHOUT LIMIT

 Suitable for the permanent, definitive and surgically invasive treatment

### **ANTI-ALLERGENIC**

 Free from metal and monomer particularly suitable for allergy sufferers

# LOW SPECIFIC MATERIAL WEIGHT HUMAN BONE-LIKE

## **AESTHETIC COLOR RANGE**

- White
- A2/B2
- GUM





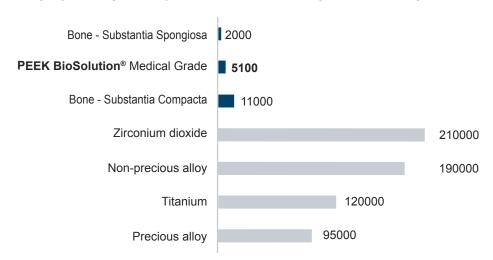


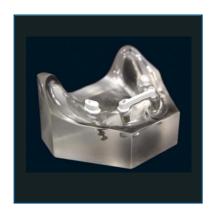
# Biobalance - Physiological

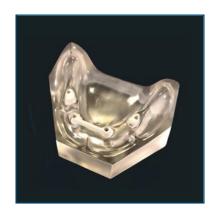
# **PEEK BioSolution®**POLYETHER ETHER KETONE

### **BIOBALANCE - PHYSIOLOGICAL**

ELASTICITY - HUMAN BONE / DENTAL FRAMEWORK MATERIALS









# Medical grade

EEK BIOSOLUTION® - MEDICAL GRADE	White & A2/B2	GUM
Flexural strength in accordance with EN ISO 20795-1	170 MPa	170 MPa
Elastic modulus/flexural modulus in accordance with EN ISO 20795-1	5100 MPa	4500 MPa
Flexural strength in accordance with EN ISO 10477	200 MPa	220 MPa
Charpy notched impact strength 1eA in accordance with EN ISO 1	179 4.1 kJ/m×	3.7 kJ/m×
Charpy impact strength 1eU in accordance with EN ISO 179 no material failure	> 100 kJ/m×	> 100 kJ/m×
Vickers hardness acc. EN ISO 6507-1	32 HV 0.2	27 HV 0.2
Ball indentation hardness EN ISO 2039-1 after 10 sec loading at 961 N	385 MPa	350 MPa
Total fracture work in accordance with EN ISO 20795-1 Standard testing for hI resins requires at least 900 J/mx	1900 J/m×	8500 J/m×
Fracture toughness in accordance with EN ISO 20795-1 Standard testing for hI resins requires at least 1.9 MPa x √	4.7 MPa x √ <i>m</i>	6.7 MPa x √m
Linear thermal expansion coefficient	1.7 þ 10 <sup>-5</sup> /K	1.7 þ 10 <sup>-5</sup> /K
Water absorption in accordance with ISO 62	0.4 %	0.4%
Sliding friction coefficient	$Al_2O_3$ r f = 0.13 $ZrO_2$ r f = 0.13	$Al_2O_3$ r f = 0.09 $ZrO_2$ r f = 0.10
Cytotoxicity test in accordance with EN ISO 10993-5	Max. value for bioco	ompatibility (= 100 °



	A2/B2	White	GUM
Ø 95 mm x 10 mm	1018955	1018950	
Ø 95 mm x 12 mm	1018956	1018951	
Ø 95 mm x 16 mm	1018957	1018952	1019223
Ø 95 mm x 20 mm	1018958	1018953	1019224
Ø 95 mm x 24 mm	1018959	1018954	1019225
Ø 95 mm x 26 mm	1018988	1018982	
Ø 95 mm x 30 mm	1018989	1018983	1019227
Ø 98.5 mm x 10 mm	1018965	1018960	
Ø 98.5 mm x 12 mm	1018966	1018961	
Ø 98.5 mm x 16 mm	1018967	1018962	1019230
Ø 98.5 mm x 20 mm	1018968	1018963	1019231
Ø 98.5 mm x 24 mm	1018969	1018964	1019232
Ø 98.5 mm x 26 mm	1018990	1018984	
Ø 98.5 mm x 30 mm	1018991	1018985	1019234

Ø 8 mm x 1.000 mm

A2/B2 1018993 White

GUM

1018992 1018994





# PEEK NATURE

# PREMIUM BIOBALANCE IN PROSTHETICS





PEEK NATURE, FOR ALL WHO PROCESS 100% BIOCOMPATIBLE MATERIALS.

**EU MEDICAL DEVICE CLASS IIa** 

**PEEK NATURE** 

#### PREMIUM BIOBALANCE FOR DENTAL PROSTHETICS

Sophisticated production technologies create a chemically inert, homogeneously crystallized and biocompatible material. The stable, lightweight PEEK, which has been proven for years in surgery, offers maximum comfort and is ideally suited for fixed and removable dental restorations. CAD/CAM-based manufacturing guarantees precision from clasp model casting to implant-supported work.

- 100% PEEK
- 100% metal-free treatment
- No biological interactions
- High chemical resistance
- Certified biomaterial

#### AREAS OF APPLICATION

PEEK *NATURE* is suitable for the production of indirect temporary and permanent dental restorations (EU medical device class IIa):

- Crowns and bridges
- Transversal connectors
- Sublingual clasps
- Frameworks for clasp dentures
- Denture bases
- Bite splints
- Retaining elements
- Telescopic crowns
- Attachments
- Retaining clasps
- Bar constructions

### **FEATURES and BENEFITS**

- Excellent dimensional stability
- Excellent gliding ability
- Excellent abrasion resistance
- Good machinability
- High heat resistance
- Physiologically harmless
- Almost no water absorption
- High chemical resistance
- Break and shatter proof
- Outstanding fracture work and toughness



#### **DENTAL LABORATORY BENEFITS**

- 100 % metal-free solution
- Excellent dimensional stability
- Scannable
- Proven biocompatibility
- Can be veneered with C&B acrylics
- Can be veneered with composite materials
- Good adhesive bonding after appropriate treatment
- Ideal for almost all fixed and removable indications
- Bone-like elasticity
- Optimal combination of strength and low weight
- Optimal ratio of rigidity, strength and toughness

## PATIENT BENEFITS

- 100 % PEEK
- 100 % metal-free treatment
- No biological interactions, certified biomaterial
- Low electrical and thermal conductivity
- Acrylate-free
- Especially suitable for allergy sufferers
- Tasteless (no metal taste)
- Excellent strength and low weight ensure a high wearing comfort
- Shock-absorbing properties during chewing
- High resistance to abrasion and fractures

	REF
Ø 95 mm x 16 mm Ø 95 mm x 20 mm	1018100 1018101
Ø 98.5 mm x 12 mm Ø 98.5 mm x 16 mm Ø 98.5 mm x 20 mm Ø 98.5 mm x 24 mm Ø 98.5 mm x 30 mm	1018102 1018103 1018104 1018105 1018106

# M-PM® DISC

# DIGITAL PRECISION BRILLIANT AESTHETICS













Biocompatibility tested

# M-PM® DISC

# BIOCOMPATIBLE, DURABLE, VERSATILE, AESTHETIC

Merz Dental PMMA Discs are industrially made of highly cross-linked filler and fibre free OMP-N® - Organic Modified Polymer-Network - precisely and highly compressed, fulfilling highest technical demands. Due to its high density the material offers excellent milling features even down to very thin wall thicknesses found in the veneering technique. Whether clear, gingival shaded, in 16 V-classic or 4 Bleach shades, M-PM® Discs from Merz Dental offer every user numerous options and applications.

# AESTHETIC TRANSLUCENCY EXACT FIT PROVEN BIOCOMPATIBILITY

- Long-term temporary crown & bridge restoration
- Splints for therapeutic restorations of cranio-mandibular disorders and function diagnostics
- Denture bases
- Temporary anterior veneers for aesthetic mould corrections
- Individual patient drilling templates (M-PM® Disc clear)

#### WIDE RANGE OF SHADES FOR VIRTUALLY ALL PMMA CAD/CAM-SOLUTIONS MADE IN GERMANY



#### **TOOTH SHADES**

16 V-Classic shades
A1-D4
translucent

4 Bleach shades BL1-BL4 translucen

■ For long-term temporary crown & bridge restorations even with thin crown margins < 50 µm



#### **CLEAR**

transparent / clear (no colorants)

- Splint therapy, with PMMA acrylic adjustable at anytime
- Lost moulds
- Drilling templates



#### **GINGIVAL**

pink pink 3 L1 (veined)

- Denture bases with highest CAD/CAM manufactured precision
- Relineable with denture acrylics of PMMA basis



#### **CONVINCING FEATURES AND BENEFITS**

#### **MATERIAL**

The M-PM® Disc ensures safety during the pre-prosthetic and temporary restoration phase through tested biocompatibility with a very low residual monomer of less than < 1%. Thanks to its shock absorption, OMP-N® is especially suitable during the healing time as initial restoration on immediate implants. Of further advantage is its plaque resistance and minimal water absorption for the soft tissue conditioning, so that the later permanent restoration is in harmony with the red-white aesthetic. A positive observational study of the University of Jena approves the wearing time of OMP-N® processed temporaries for up to 36 months.

## **AESTHETIC**

No aesthetic compromises have to be made with the M-PM® Discs during the temporary and long-term restoration. Temporary crowns and bridges milled from translucent shaded M-PM® Discs adapt harmonically to the remaining teeth without any color individualization. The material allows a natural looking chameleon effect like - light transmission and is therefore preventing aesthetical and psychosocial constraints during the wearing and healing time for the patient.

#### **VERSATILITY**

Due to its PMMA-base the precisely milled OMP-N® parts can be added on and relined with any customary PMMA acrylic at any time. This is especially of advantage for the gingival shaded M-PM® Disc. Furthermore durable splints can be processed from the clear M-PM® Disc. As the clear acrylic does burn out fully, casting parts can also be processed.





**EU MEDICAL DEVICE CLASS IIa** 

# M-PM® DISC

#### **DIGITAL PRECISION. BRILLIANT AESTHETIC.**

# HIGH PERFORMANCE POLYMER HIGH END QUALITY FROM THE POLYMER SPECIALIST MADE IN GERMANY

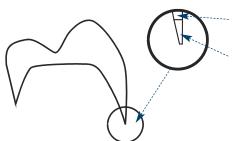
M-PM® Discs are manufactured under highest quality standards. Here, using the latest high pressure polymerization in multistage pressure and temperature curves highly cross-linked milling blanks are produced. This ensures optimal mechanical and chemical properties due to high cross-linking of the polymer chains with the highest porosity freedom.

# ORGANIC MODIFIED POLYMER NETWORK OMP-N® - FOR MORE QUALITY

Unfilled high-performance polymers such as OMP-N® transmit light better than ceramics, and allow easy handling and very good polishing with an optimal bonding to all PMMA and MMA-based acrylics.

In the submicroscopic area spatially linked macromolecule structures occupy the spaces between larger polymer beads in the chemical bond. Therefore the material achieves better chemical and mechanical properties. A special tempering process minimises material stresses and the residual monomer content is reduced to below 1%.

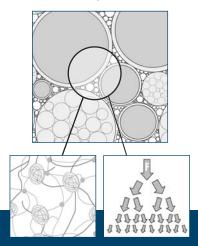
High elasticity, no chipping due to filler and fibre-free formulation. The material absorbs the forces acting on the temporary restoration. Crown and bridge abutments are relieved. OMP-N® has a very good plaque resistant surface compaction after polishing even with conventional polishers, polishing wheels and polishing agents.



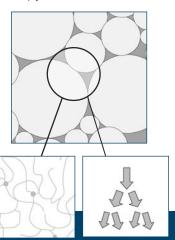
Most acrylic discs from other manufacturers fracture already at wall thicknesses < 200 µm.

The filler and fibre-free OMP-N® acrylic with its high degree of cross-linking enables a very delicate edge design on crowns and bridges.

OMP-N° Organic Modified Polymer-Network

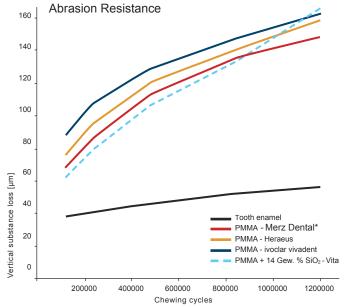


Conventional PMMA simply cross-linked



## **PREMIUM QUALITY**

- Highly cross-linked
- Abrasion resistant
- Tissue friendly
- Plaque resistant
- Chemically stable
- Translucent\* and color stable
- Low water absorption
- High bond to PMMA base acrylic
- Temperature resistant
- Easy handling and polishing
- Free form inorganic fillers and fibres
- Resilient and shock absorbing



\*OMP-N° specially processed interpenetrated network

Graph based on Ghazal et al.: Two-body wear of resin and ceramic denture teeth in comparison to human enamel. Dental Materials 4 (2007) 24, p. 502-507

Properties	Standard	Result
Density	1.19 g/cm³	EN ISO 1183-1
Water solubilityt	0.2 μg/mm³	EN ISO 10477
Flexual strength	91.5 MPa / 96.6 MPa	EN ISO 10477 / EN ISO 20795-1
Absorption	26.5 μg/mm³	EN ISO 10477
Module of elasticity	2773 MPa	EN ISO 20795-1

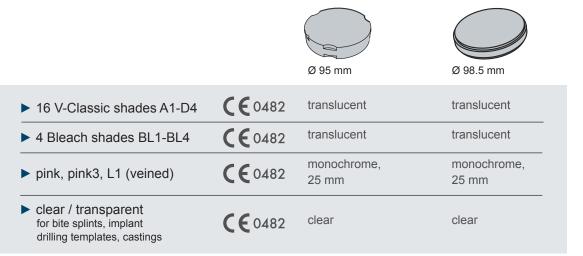
<sup>\*</sup> V-Classic shades A1-D4 and Bleach shades BL1-BL4



# M-PM® DISC

## FOR (ALMOST) EVERY MACHINE THE RIGHT GEOMETRY

PMMA DISC MADE IN GERMANY





M-PM® Disc Shade Guide (A-D + Bleach) REF 1019247

	Shade REF		Shade	REF		Shade	REF		Shade	REF
	clear / 1019206 transparent	Ø 95 mm x 20 mm without step suitable for Zirkonzahn® CAM	A1 A2 A3 A3.5 A4 B1 B2 B3	1019164 1019165 1019166 1019167 1019168 1019170 1019171 1019172 1019173 1019174 1019175 1019176 1019177 1019178 1019179 1019180 1019181 1019182	Ø 95 mm x 25 mm without step  suitable for Zirkonzahn CAM	A2 A3 A3.5 A4 pink	1019186 1019187 1019188 1019189 1019207	Ø 98.5 mm x 16 mm with step	A1 A2 A3 A3.5 A4 B1 B2 B3 B4 C1 C2 C3 C4 D2 D3 D4 Bleach BL1 Bleach BL2 Bleach BL3 Bleach BL4 clear / transparent	1019084 1019085 1019086 1019087 1019088 1019089 1019090 1019091 1019092 1019093 1019094 1019095 1019096 1019097 1019098 1019099 1019100 1019101 1019101
XY	Shade	REF			Shade	REF			Shade	REF
Ø 98.5 mi x 20 mi with step	m A1 m A2 A3 A3.5 A4 B1 B2 B3 B4 C1 C2 C3 C4 D2 D3 D4 Bleach BL1 Bleach BL2 Bleach BL3 Bleach BL4	1019104 1019105 1019106 1019107 1019108 1019109 1019110 1019111 1019112 1019113 1019114 1019115 1019116 1019117 1019118 1019119 1019120 1019121 1019121		98.5 mm x 25 mm th step	A1 A2 A3 A3.5 A4 B1 B2 B3 B4 C1 C2 C3 C4 D2 D3 D4 Bleach BL1 Bleach BL2 Bleach BL3 Bleach BL4 pink	1019240 1019236 1019237 1019404 1019238 1019239 1019407 1019408 1019410 1019411 1019412 1019413 1019414 1019415 1019416 1019417 1019418 1019418 1019419 1019208 1019246		Ø 98.5 mm x 30 mm with step	A1 A2 A3 A3.5 A4 B1 B2 B3 B4 C1 C2 C3 C4 D2 D3 D4 Bleach BL1 Bleach BL2 Bleach BL3 Bleach BL4 pink pink 3 L1 (veined)	1019420 1019421 1019422 1019423 1019424 1019425 1019426 1019427 1019428 1019430 1019431 1019432 1019433 1019434 1019435 1019436 1019437 1019438 1019438 1019438 1019439 1019278
5 pcs. Ø	ACKS 98.5 mm x 16 mr 98.5 mm x 20 mr 98.5 mm x 25 mr	n clear / trans	parent 10°	19276 19275 19277	pir	nk 3	L1 (veir	ned)	pink	0482

# M-PM<sup>®</sup> crystal

A CLEAR SOLUTION







**EU MEDICAL DEVICE CLASS IIa** 

# M-PM® crystal

# A CLEAR SOLUTION FOR PRICE-CONSCIOUS PROFESSIONALS

Die M-PM® crystal consists of a high-purity thermoelastic PMMA, which is made according to the high quality standards in an industrial polymerization and manufacturing process. The M-PM® crystal is the economical alternative for splint technology. The crystal clear, color stable material is convincing by its homogeneity, low plaque adhesion and low water absorption. The M-PM® crystal can be adjusted and repaired with PMMA acrylics.

#### AREAS OF APPLICATION

- Occlusal splints
- Drilling templates for navigated implantation
- "Lost moulds" for casting technology

## **FEATURES and BENEFITS**

- Crystal clear, color stable
- Certified biocompatibility
- Free from inorganic and organic peroxides such as B. dibenzoyl peroxide
- Low residual monomer content: < 1%
- High homogeneity
- Low plaque adhesion
- Low water absorption
- Can be extended and repaired with PMMA
- Economical alternative to the bite splint technology
- High-molecular, cross-linked PMMA

#### PHYSICAL SPECIFICATIONS

Properties	Standard	Result
Flexual strength	EN ISO 10477	156 ± 6 MPa
Module of elasticity	EN ISO 20795-1	3000 ± 100 MPa
Glass transition temperature	ISO 11357	121 °C
Vickers hardness	EN ISO 6507-1	23.2 ± 0.3 HV 0.2
Absorption	EN ISO 20795-1	< 32 μg / mm³
Water solubility	EN ISO 20795-1	< 1.6 µg / mm³



Available in Bulk Packs



		REF
	Ø 95 mm x 14 mm	1019262
	Ø 95 mm x 16 mm	1019254
	Ø 95 mm x 20 mm	1019255
	Ø 95 mm x 25 mm	1019256
	Ø 95 mm x 30 mm	1019257
	Ø 98.5 mm x 14 mm	4040000
	2 00.0	1019263
	Ø 98.5 mm x 16 mm	1019250
	Ø 98.5 mm x 20 mm	1019251
	Ø 98.5 mm x 25 mm	1019252
	Ø 98.5 mm x 30 mm	1019253
	Ø 100 mm x 14 mm	1019264
	Ø 100 mm x 16 mm	1019258
	Ø 100 mm x 20 mm	1019259
	Ø 100 mm x 25 mm	1019260
	Ø 100 mm x 30 mm	1019261
	Ø 120 mm x 16 mm	1019270
	Ø 120 mm x 20 mm	1019271
BULK I	PACKS	
12 pcs.	Ø 95 mm x 16 mm	1019265
	Ø 95 mm x 20 mm	1019266
12 pcs.	Ø 98.5 mm x 16 mm	1019268
10 pcs.	Ø 98.5 mm x 20 mm	1019269

# artBloc® Temp

for CEREC® and inLab®

PMMA-Block









# artBloc® Temp for CEREC® and inLab®

# TOOTH SHADED PMMA BLOCK FOR THE LONG-TERM TEMPORARY AND PRE-PROSTHETICS RESTORATION OF ANTERIOR AND POSTERIOR REGIONS

artBloc® Temp is an unique monochrome tooth-colored block made of highly cross-linked interpenetrated OMP®-N (Organic Modified Polymer Network). Without inorganic fillers, this material provides high plaque resistance and EN ISO 10477 compliant flexural strength of more than 90 MPa. Furthermore this material has been awarded with best test results regarding breaking strength values in the group of millable, tooth-shaded temporary acrylic blocks for CEREC® and inLab® amounting to 335 N and guarantees process reliability compared to conventional temporary chairside C+B materials.

# PRE-PROSTHETICS TREATMENT AND SOFT-TISSUE MANAGEMENT

In the context of a preprosthetic treatment plan, the artBloc® Temp is intended for temporary restorations, until the requirements for a final prosthetic solution are established with clinical and prosthetically acceptable parameters. Due to its plaque resistance, artBloc® Temp is the optimum treatment regarding soft-tissue management. It can also be used for re-establishing the occlusal support field for therapeutic restorations when correcting temporomandibular disorders.

#### AREAS OF APPLICATION

- Single and partial restorations
- 4-unit bridges
- Immediate implant restorations
- Long-term temporary as well as semipermanent pre-prosthetic restorations
- Wearing time: up to 3 years

#### **FEATURES and BENEFITS**

- Block dimensions 15.5 x 19 x 39 mm
- Fibre-free and without inorganic fillers
- Tissue-friendly and plaque resistant
- Homogeneity and high cross-linked due to most modern industrial manufacturing process, made in Germany
- Extreme flexural strength
- Shock-absorbent, particularly for initial implant restorations
- Color stable with high aesthetics
- High temperature and form stability
- Outstanding polishing characteristics using standard tools
- Multiple resettability on the post
- All provisional cements (eugenol-free) can be used for cementing

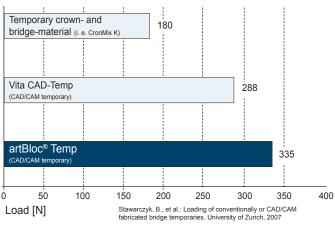
#### TECHNICAL DATA

For software and technical requirements, milling configuration etc. please visit www.merz-dental.de

#### PHYSICAL SPECIFICATIONS

Flexural strength	93 MPa according EN ISO 10477
Module of elasticity	2680 MPa according EN ISO 20795-1
Absorption	Complies with EN ISO 10477 crown and bridge resins
Water solubility	Complies with EN ISO 10477 crown and bridge resins
Shade stability	Complies with EN ISO 10477 crown and bridge resins

# LOADING OF THREE-UNIT TEMPORARIES



Block dimensions: 15.5 x 19.0 x 39.0 mm

Shade	<b>A</b> 1	A2	A3	A3.5	<b>A</b> 4	B1	B2	В3	B4
Content	REF	REF	REF	REF	REF	REF	REF	REF	REF
2 pcs. monochrome monochrome translucent	1017721	1017722	1017723	1017724	1017725	1017726	1017727	1017728	1017729
	1017670	1017671	1017672	1017673	1017674	1017675	1017676	1017677	1017678
<b>10</b> pcs. monochrome monochrome translucent	1017700	1017701	1017702	1017703	1017704	1017705	1017706	1017707	1017708
	1017650	1017651	1017652	1017653	1017654	1017655	1017656	1017657	1017658

Shade	C1	C2	C3	C4	D2	D3	D4
Content	REF						
2 pcs. monochrome monochrome translucent	1017730	1017731	1017732	1017733	1017735	1017736	1017737
	1017679	1017680	1017681	1017682	1017683	1017684	1017685
10 pcs. monochrome monochrome translucent	1017709	1017710	1017711	1017712	1017714	1017715	1017716
	1017659	1017660	1017661	1017662	1017663	1017664	1017665

Shade	BL1	BL2	BL3	BL4
Content	REF	REF	REF	REF
2 pcs. monochrome monochrome translucent	1017738	1017739	1017740	1017741
	1017686	1017687	1017688	1017689
10 pcs. monochrome monochrome translucent	1017717	1017718	1017719	1017720
	1017666	1017667	1017668	1017669

# M-PRINT

# ADDITIVE MANUFACTURING



# **READY 2 PRINT**

- Free of fillers and suspended matter for maximum precision and accuracy of fit
- Free of color pigments
  for maximum sedimentation stability
- Homogeneous formulation for maximum stability and fracture toughness
- No deposit during the entire production time
  No shaking necessary before use!





# **ADDITIVE MANUFACTURING**











Finest structures





### **M-PRINT Proto**

### **RAPID-PROTOTYPING**

Light-curing acrylate-based premium resin for the additive manufacturing of objects of all kinds.

### AREAS OF APPLICATION

3D printed objects of all kinds

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Printing from 25 µm to 100 µm layer thickness
- High shape and edge stability for best results of filigree structures and objects
- High dimensional stability and warp resistance for precise, warp-free objects
- Maximum surface hardness for mechanical stress without changes in shape
- Designed for tray-based photopolymerization at 385 nm

### DELIVERY FORM / COLOR

1000 g, color clear REF 1084025
 1000 g, color cobalt-blue REF 1084026

## **M-PRINT Cast**

### **CAST OBJECTS**

Burn-out, light-curing acrylate-based premium resin for the additive manufacturing of objects in the press and model casting technique.

### AREAS OF APPLICATION

- Cast objects of all kinds
- Applicable in the conventional as well as in the speed casting process for press ceramics e.g. veneers, inlays or onlays

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Burns-out without residue (< 0.1%), even with large volume parts
- Warp-free, even with large-volume (voluminous) objects
- Matched to phosphate-bonded investment materials
- High strength, shape and edge stability, best drawing accuracy for filigree structures
- The finest structures thanks to layer thicknesses of up to 25 μm - precise reproduction with the finest surface structure
- Designed for tray-based photopolymerization at 385 nm

### DELIVERY FORM / COLOR

■ 1000 g, color purple REF 1084010

# 3D LIQUIDS





### **M-PRINT Model**

### **PRODUCTION OF MODELS**

Opaque, light- and moisture-stable, light-curing 3D printing resin for the production of very precise, true-to-detail master, stump and / or functional models with finest and smooth surface structure.

### AREAS OF APPLICATION

- Models
- Model stumps
- Models for splints and functional models

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Very dimensionally stable, precisely grindable preparation lines optimally visible through opacity
- High construction precision for an excellent fit of model stumps
- High efficiency thanks to the low-viscosity setting of the resin for lower material consumption and short post-processing
- Designed for tray-based photopolymerization at 385 nm

### **INDIVIDUAL IMPRESSION TRAYS**

Light-curing, bio-compatible 3D printing resin for the production of individual functional trays and impression trays, bite registration, transfer keys and base plates.

### AREAS OF APPLICATION

**M-PRINT Tray** 

- Individual functional trays and impression trays
- Bite registrations
- Registrate
- Transfer keys
- Base plates

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- High dimensional stability and warp resistance for exact, distortion-free impressions
- Odorless and tasteless
- Retention holes can be planned in advance in the CAD modeling
- Effective, as it is optimised for high printing speeds and high layer thicknesses of up to 150 µm
- Designed for tray-based photopolymerization at 385 nm

### **DELIVERY FORM / COLOR**

1000 g, color ash-gray
 1000 g, color taupe-gray
 1000 g, color sand
 REF 1084018
 REF 1084020

### **DELIVERY FORM / COLOR**

1000 g, color aqua
 1000 g, color hot-pink
 REF 1084035
 REF 1084036





# **ADDITIVE MANUFACTURING**





Matched to the production of digital dentures with the Baltic Denture System



Medical Device Class I Without fillers & pigments



# M-PRINT TryIn

### **TRY-INS**

Light-curing, bio-compatible 3D printing resin for the production of try-ins for the intraoral check-up of digitally designed dentures..

### AREAS OF APPLICATION

- Try-in for removable full and partial dentures
- Correction impression and bite registration

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- For realistic assessment of fit, phonetics and aesthetics prior to final construction
- Suitable for checking bite registration and occlusion functionality
- Available in the colors ivory and gum for monochrome try-ins or aesthetic bicolor
- Odorless and tasteless
- High precision for excellent fit of denture base and arch
- Designed for tray-based photopolymerization at 385 nm
- Precisely grindable for patient-specific adjustments by the dentist
- Designed for tray-based photopolymerization at 385 nm

# **M-PRINT Surgical guide**

### **DRILLING TEMPLATES**

Biocompatible, liquid, light-curing acrylate-based premium resin especially tailored for surgical drilling templates for exact contouring in the area of drill sleeves.

### AREAS OF APPLICATION

- Drilling templates for the surgically precise and safe insertion of dental implants
- Positioning templates

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- Dimensionally stable, for the exact positioning and fixation of the drill sleeves, for safe insertion in the patient
- Very good precision and a perfect fit for the respective bone and soft tissue conditions
- Warp resistant, for the surgically precise and safe insertion of dental implants
- Color ice blue for visual control in the work area
- Easily polishable
- Mucous membrane friendly
- Designed for tray-based photopolymerization at 385 nm

### DELIVERY FORM / COLOR

500 g, color ivory
 1000 g, color ivory
 500 g, color gum
 1000 g, color gum
 1000 g, color gum
 REF 1084048
 1000 g, color gum
 REF 1084049

### **DELIVERY FORM / COLOR**

■ 1000 g, color ice-blue REF 1084040





CE

CE

# 3D LIQUIDS





# M-PRINT Surgical guide HT

### STERILISABLE DRILLING TEMPLATES

Biocompatible, liquid, light-curing acrylate-based premium resin especially tailored for sterilisable surgical drilling templates for exact contouring in the area of drill sleeves.

### AREAS OF APPLICATION

- Drilling templates for the surgically precise and safe insertion of dental implants
- Positioning templates

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- Dimensionally stable, for the exact positioning and fixation of the drill sleeves, for safe insertion in the patient
- Very good precision and a perfect fit for the respective bone and soft tissue conditions
- Warp resistant, for the surgically precise and safe insertion of dental implants
- Color ice blue for visual control in the work area
- High rigidity, low deformation due to a very high modulus of elasticity
- Easily polishable
- Mucous membrane friendly
- Steam sterilisable up to 273.2 °F (134 °C)
- Designed for tray-based photopolymerization at 385 nm

### **DELIVERY FORM / COLOR**

■ 1000 g, color spring-green REF 1084041

# **M-PRINT Splint**

### **OCCLUSAL SPLINTS AND BITE SPLINTS**

Biocompatible, light-curing premium acrylate-based resin for the additive manufacturing of occlusal / bite splints of all kinds.

### AREAS OF APPLICATION

- Occlusal splints and bite splints of any kind
- Bleaching trays

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- Medical Device Class IIa can permanently remain in the mouth
- High precision for a perfect fit
- Color stable, permanently clear
- Dimensionally stable
- Easily polishable
- Designed for tray-based photopolymerization at 385 nm

### **DELIVERY FORM / COLOR**

■ 1000 g, color clear REF 1084050









# ADDITIVE MANUFACTURING





Medical Device Class II a

Unlimited wearing time



# **M-PRINT Splint flex**

### FLEXIBLE OCCLUSAL SPLINTS AND BITE SPLINTS

Biocompatible, light-curing premium acrylate-based resin for the additive manufacturing of flexible occlusal splints / bite splints of all kinds.

### AREAS OF APPLICATION

- Flexible occlusal splints and bite splints of any kind
- Bleaching trays

### **FEATURES and BENEFITS**

- Ready 2 Print no shaking necessary
- Biocompatibility tested according to EN ISO 10993-1
- Medical Device Class IIa can permanently remain in the mouth
- Increased wearing comfort thanks to pleasant flexibility
- High precision for a perfect fit
- Color stable, permanently clear
- Dimensionally stable
- Easily polishable
- Designed for tray-based photopolymerization at 385 nm

### DELIVERY FORM / COLOR

■ 1000 g, color clear REF 1084051







M-PRINT	Areas of application	MDC*	Color	Viscosity	Flexural strength	Module of elasticity	Glass transition	Vickers hardness	Wave- length	Layer thickness
Proto	• 3D printed objects of all kinds	-	clear • cobalt-blue	920 ± 100 mPa·s	108 ± 4 MPa	3000 ± 100 MPa	93 °C 1 HV0,2	20 ±	385 nm	25 μm 50 μm 100 μm
Cast	Cast objects of all kinds	-	• purple	1000 ± 200 mPa·s	104 ± 3 MPa	2900 ± 200 MPa	86 °C	-	385 nm	25 μm 50 μm 100 μm
Model	<ul> <li>Models</li> <li>Model stumps</li> <li>Models for splints and functional models</li> </ul>	-	<ul><li>ash-gray</li><li>taupe-gray</li><li>sand</li></ul>	950 ± 100 mPa·s	68 ± 2 MPa	1600 ± 100 MPa	-	-	385 nm	25 μm 50 μm 100 μm
Tray	<ul> <li>Individual functional trays and impression trays</li> <li>Bite registrations</li> <li>Transfer keys</li> <li>Base plates</li> </ul>	I	• aqua • hot-pink	900 ± 100 mPa·s	116 ± 10 MPa	2900 ± 300 MPa	91 ℃	-	385 nm	50 μm 100 μm 150 μm
Tryin	<ul><li>Try-in</li><li>Correction impression</li><li>Bite registration</li></ul>	I	• ivory** • gum**						385 nm	50 μm 100 μm
Surgical guide	<ul><li> Drilling templates</li><li> Positioning templates</li></ul>	I	ice-blue	830 ± 100 mPa·s	100 ± 8 MPa	2600 ± 200 MPa	96 °C	-	385 nm	25 μm 50 μm 100 μm
Surgical guide HT	Sterilisable drilling templates     Sterilisable positioning templates	I	• spring-green	650 ± 100 mPa·s	130 ± 5 MPa	3150 ± 130 MPa	-	-	385 nm	25 μm 50 μm 100 μm
Splint	<ul><li>Occlusal / bite splints</li><li>Bleaching trays</li></ul>	lla	clear	825 ± 100 mPa·s	70 ± 6 MPa	1800 ± 200 MPa	93 ℃	20 ± 1 HV0,2	385 nm	25 μm 50 μm 100 μm
Splint flex	Flexible occlusal / bite splints     Bleaching trays	lla	clear	700 ± 100 mPa·s	-	-	-	-	385 nm.	25 μm 50 μm 100 μm

<sup>\*</sup>Medical Device Class

<sup>\*\*</sup>planned

# PRINTER COMPATIBILITY OVERVIEW



M-PRINT 3D printing liquids are generally compatible with DLP printers with a wavelength of 385 nm. Print parameters are available for the following printers.

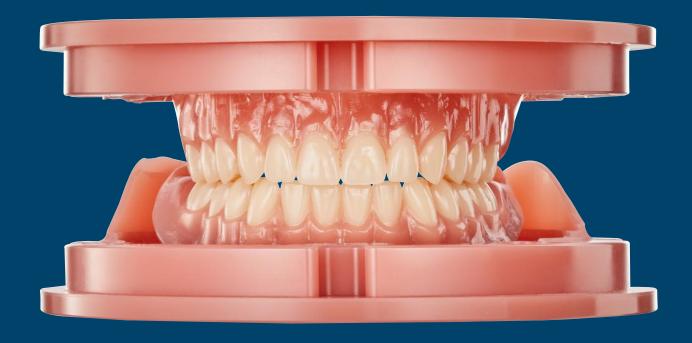
Updated overview available at www.merz-dental.com

EU Medical Device Class	<ul><li>available print parameterr</li><li>parameters under evaluation</li></ul>			Nexa3D	Carima	W2P	Voco	Rapid Shape	Asiga	Ackuretta	DEKEMA
EU Me	M-PRINT REF			XiP	Carima IMD	SolFlex / SolLab	SolFlex 170 / 350 / 650	D20+ / D30+ / D40+	Pico / PRO / MAX / PRO 4 K	FreeShape 120	trix print²
TECHNICAL RESINS	Proto	clear	1084025	•	~	~	~	•	•	<b>✓</b>	•
		cobalt-blue	1084026	•	~	~	~	•	~	~	~
	Cast	purple	1084010	~	~	~	~	~	~	<b>✓</b>	~
	Model	ash-gray	1084017	~	~	~	~	~	~		~
		taupe-gray	1084018	~	~	~	~	~	~		~
		sand	1084020	~	~	~	~	~	~		~
MEDICAL RESINS	Tray	aqua	1084035	>	~	~	~	~	/	>	~
		hot-pink	1084036	>	~	~	~	~	<b>\</b>	<b>/</b>	~
	Surgical guide	ice-blue	1084040	•	~	~	-	~			~
	Surgical guide HT	spring-green	1084041	•	~	~	~	•	~		~
lla	Splint	clear	1084050	•	~	~	~	~	~		~
lla	Splint flex	clear	1084051	•	<b>V</b>	<b>V</b>	<b>v</b>	~	~		~

Users are responsible for using the product themselves. Merz Dental assumes no liability and/or guarantee for the use of non-system components and/or components that have not been tested or for incorrect results, as the manufacturer has no influence on processing. Any claims for damages that may still arise relate exclusively to the value of our products. The company and product names of third parties mentioned are trademarks or registered trademarks of the respective manufacturers. Quoting such designations without reference to a trademark or similar (registered and/or protected) should not be considered a infringement of the intellectual property rights of these designations, nor should they be regarded as damaging to the companies that own these rights.



# DIGITAL SOLUTION FOR DENTURES





# **DIGITAL DENTURE - 100 % Your Way**

- Digital production of full dentures in an innovative way
- Efficiency potential for practice and laboratory
- Digital work preparation for more precise results, process reliability and more efficiency

# IT'S UP TO YOU!

The conventional manufacturing process for a full denture is very complex and time-consuming. Merz Dental's decades of experience in the development of teeth are concentrated in the Baltic Denture System. This process is reduced to 2 patient appointments with less manual work thanks to an optimised workflow.

### YOUR BENEFIT

- High process and manufacturing reliability through predictable results
- Efficient and economic through optimised processes
- Time saving through reduction of process steps and semi-automated processes
- Reproducible result due to the presence of digital information
- High patient satisfaction



The entry into the digital workflow is very flexible with the Baltic Denture System:



Impression with the old denture



Conventional impression



Impression with the BDKEY® Set





SCAN DESIGN MANUFACTURING



### **BDLoad®**

# MILLING BLANK WITH INTEGRATED OCCLUSION CONCEPT

### AREAS OF APPLICATION

- Standardized set-up from the <sup>BD</sup>Creator® PLUS
- Polymerised set-up of the teeth in lingualized occlusion
- Optional software-based individual anterior tooth set-up

### **FEATURES and BENEFITS**

- Fast production, only one milling process
- No glueing-in of teeth or rows of teeth
- No interdental closing
- No model fabrication necessary
- No manual grinding required
- No polymerization shrinkage
- Residual monomer content below 1%, reduced allergenic potential
- Highest bond quality between tooth and denture base material
- Repairable and relineable
- Very low plaque affinity
- Less pressure points thanks to excellent fit
- Low water absorption due to very high material density
- Odorless and tasteless

### **DELIVERY FORM**

- Sizes: S, M, L
- Jaw widths: narrow, medium, wide
- Tooth set-up: 6-6 + 7-7 optional individual anterior tooth set-up
- Tooth shades: 16 V-shades + 4 Bleach shades
- Denture base shades: pink + dark pink
- Denture base material: highly cross-linked PMMA + High Impact

# **BALTIC DENTURE SYSTEM**



Fully adjustable virtual articulator

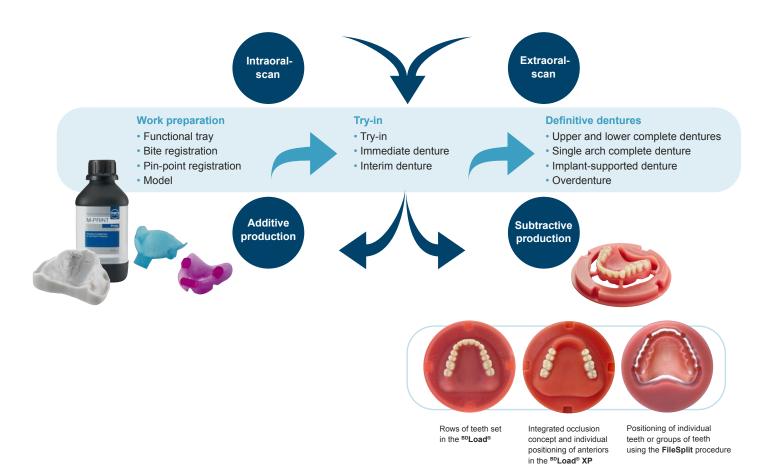
# BD Creator® PLUS

### One software

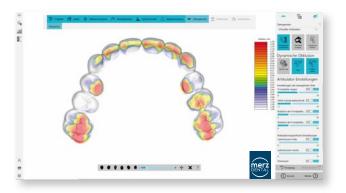
- All applications for removable full dentures in one software
- No interruption of the workflow by third-party software
- Including analyses, cutting functions and hole closures
- Open production: Printing or milling in BDLoad®, BDLoad® XP, via FileSplit tooth arch and base or pockets

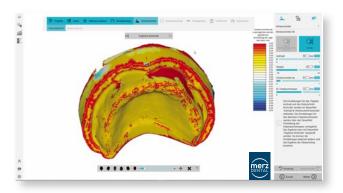
### **All indications**

- Full dentures of all Angle classes (I-III)
- Unimaxillary (single) dentures
- Overdenture via attachment
- Full immediate and interim dentures
- Efficient planning in BDLoad® or individualization through digital repositioning of rows of teeth or single teeth



# BD CREATOR® PLUS





**Occlusal correction** 

Mesh analysis

The

BDCreator® PLUS
guides you through the
process, regardless
of your choice.

### All benefits at a glance:

Design full denture

Design of single arch complete dentures

Occlusal correction

Virtual articulator

Design full interim and immediate dentures, overdentures

Design individual bite registrations incl. offset option

Design individual trays incl. offset option

Design pin-point registrations (Gnathometer)

Matching tool for scan-data

Editing of STL-files

Mesh editing and analysis

Model analysis

Undercut control

Undercut adjustment, relief zones

Add, edit and/or remove material, smoothing function

Online help

Further additional functions for an optimal design



BDCreator® *PLUS* brochure REF 1092168





