# Technical Data Sheet







# **TEMPORIS®: THE BIOCOMPATIBLE MATERIAL**

Temporis® is a photosensitive composite material for the custom fabrication of dental restorations such as inlays, bridges and crowns.

Temporis® is a Class IIa CE marked medical device\* for the fabrication of temporary inlays, crowns or bridges for long-term applications, up to the creation of a permanent restoration.

To meet aesthetic and functional requirements, Temporis® is available in different colors and shades and can be easily shaped and polished. For a perfect customization, Temporis® can be coated with biocompatible compounds and personalized with any kind of pigmentation.

The so-configured prosthesis is a bespoke disposable medical device.



#### **FEATURES**

- Superior surface quality
- High dimensional stability
- Precise fit
- Available in six shades: N, A1, A2, A3, A3.5, B1
- Available in Photoshade adaptive gradient technology (DFAB Chairside and DFAB Desktop only)

#### **ADVICE FOR USE**

Temporis<sup>®</sup> is specifically developed for the use in DWS dental 3D printers XFAB 2500PD, XFAB 3500PD, DFAB Chairside, DFAB Desktop and LFAB.

Exclusively for DFAB Chairside and DFAB Desktop, the Photoshade technology provides adaptive gradient feature.

In order to increase the mechanical performances of the restorations and to guarantee their proper stability, the use of the specifically designed DCURE curing device with its thermal/UV post-treatment is recommended.

#### TECHNICAL CHARACTERISTICS OF THE LIQUID MATERIAL

Environmental value for use	22°C - 27°C - max, RH 40% - 60%
Appearance / Color	Liquid / 6 shades available
Density	1,38 g/cm³
Viscosity	2000 ~ 3000 mPa•s at 25°C

# TECHNICAL CHARACTERISTICS OF THE RESIN AFTER UV CURING

Flexural strength (MPa) (ISO 10477)	> 80
Water sorption (µg/mm³) (ISO 10477)	< 40
Water solubility (µg/mm³) (ISO 10477)	< 1.4
Application/use	Long-term restorations

This document is reserved for healthcare professionals as it contains information on medical devices that may create situations of danger to the health and safety of the patient if not correctly read, understood and applied by a professional.

#### **DWS**



<sup>\*</sup> Long-term invasive medical device in Class IIa according to Rule 5 of Annex IX, Dir. 93/42/EEC.

# **ADVICE FOR USE**

Follow the operating instructions for your 3D printer in the model specified by DWS.

#### **RESTRICTIONS OF USE AND WARNINGS**

Temporis® is a medical device that must be strictly used by specifically trained personnel (dental technician, dentist).

The clinician must take an accurate anamnesis of the patient before proceeding with the placement of the prosthesis.

Configured following the polymerization process, the prosthesis must be placed on the patient in a properly hygienic environment. Clean the device with a disinfectant solution prior to placement on the patient.

# **CONTROINDICATIONS**

An accurate anamnesis of the patient must be done, with the aim to identify potential intolerances or allergies to methacrylates.

#### **SAFETY**

Device in liquid form may cause skin irritation, eye irritation, and skin sensitization.

Contact with the solidified material is not hazardous.

# PRECAUTIONS AND PROTECTIVE MEASURES

Avoid direct contact with skin and eyes, use protective goggles and nitrile gloves when handling the device. In case of skin contact, wash with plenty of water and soap. If skin irritation or rash occurs, contact the doctor. In case of eye contact, carefully rinse eyes with water for several minutes. If irritation persists, contact the doctor. Detailed safety information is available in the MSDS at www.dwssystems.com.

#### **STORAGE**

Store in a cool, dry place out of direct sun light or heat source. Store at 5° - 30°C.

#### **DISPOSAL**

Refer to local regulations.

#### **INFORMATION FOR ORDERS**

CODE	PRODUCT
10200227	TEMPORIS N, TUBE, SET 2
10200228	TEMPORIS A1, TUBE, SET 2
10200229	TEMPORIS A2, TUBE, SET 2
10200230	TEMPORIS A3, TUBE, SET 2
10200231	TEMPORIS A3.5, TUBE, SET 2
10200232	TEMPORIS B1, TUBE, SET 2
10200395	TEMPORIS N, DLTY 1-2 U SIZE S, SET 5
10200396	TEMPORIS A1, DLTY 1-2 U SIZE S, SET 5
10200397	TEMPORIS A2, DLTY 1-2 U SIZE S, SET 5
10200398	TEMPORIS A3, DLTY 1-2 U SIZE S, SET 5
10200399	TEMPORIS A3.5, DLTY 1-2 U SIZE S, SET 5
10200400	TEMPORIS B1, DLTY 1-2 U SIZE S, SET 5
10200401	TEMPORIS N, DLTY 3-4 U SIZE M, SET 3
10200402	TEMPORIS A1, DLTY 3-4 U SIZE M, SET 3
10200403	TEMPORIS A2, DLTY 3-4 U SIZE M, SET 3
10200404	TEMPORIS A3, DLTY 3-4 U SIZE M, SET 3
10200405	TEMPORIS A3.5, DLTY 3-4 U SIZE M, SET 3
10200406	TEMPORIS B1, DLTY 3-4 U SIZE M, SET 3

CODE	PRODUCT
10200407	TEMPORIS N, DLTY 5-6 U SIZE L, SET 3
10200408	TEMPORIS A1, DLTY 5-6 U SIZE L, SET 3
10200409	TEMPORIS A2, DLTY 5-6 U SIZE L, SET 3
10200410	TEMPORIS A3, DLTY 5-6 U SIZE L, SET 3
10200411	TEMPORIS A3.5, DLTY 5-6 U SIZE L, SET 3
10200412	TEMPORIS B1, DLTY 5-6 U SIZE L, SET 3
10200413	TEMPORIS PHOTOSHADE, DLTY 1-2 U SIZE S, SET 5
10200414	TEMPORIS PHOTOSHADE, DLTY 3-4 U SIZE M, SET 3
10200415	TEMPORIS PHOTOSHADE, DLTY 5-6 U SIZE L, SET 3

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#### **DWS**



# IRIX® MAX

Technical Data Sheet

# IRIX® MAX: THE NEW CERAMIC FILLED HYBRID COMPOSITE MATERIAL FOR PERMANENT RESTORATIONS

Irix® Max is a new photosensitive ceramic filled hybrid composite material (42% of ceramic in weight) for the customized production of permanent restorations such as: inlays, onlays, veneers, single crowns and bridges up to three elements by stereolithographic 3D printing.

Irix® Max is a Class IIa CE marked medical device\*.

To meet aesthetic and functional requirements, Irix® Max is available in different monochromatic shades and the unique Photoshade adaptive gradient.

Restorations made with Irix® Max are characterized by excellent esthetics and high strength values. For perfect characterization, they can be customized with biocompatible products (lacquer, glaze, etc.) and/or light-curing colors.

The so-configured prosthesis is a bespoke disposable medical device.



\*Long-term invasive medical device in Class IIa according to Rule 5 of Annex IX, Dir. 93/42/EEC.

# **FEATURES**

- High translucency
- Superior surface quality
- High dimensional stability
- Precise fit
- Available in six shades: N, A1, A2, A3, A3.5, B1
- Available in Photoshade adaptive gradient technology (DFAB Chairside and DFAB Desktop only)

# **ADVICE FOR USE**

Irix® Max is specifically developed for the use in DWS dental 3D printers DFAB Chairside, DFAB Desktop and LFAB.

Exclusively for DFAB Chairside and DFAB Desktop, the Photoshade technology provides adaptive gradient feature.

In order to increase the mechanical performances of the restorations and to guarantee their proper stability, the use of the specifically designed DCURE curing device with its thermal/UV post-treatment is recommended.

#### TECHNICAL CHARACTERISTICS OF THE LIQUID MATERIAL

Valori ambientali di utilizzo	22°C - 27°C - max, RH 40% - 60%
Aspetto / Colore	Liquid / 6 shades available
Densità	1,36 g/cm <sup>3</sup>
Viscosità	~ 6000 mPa•s at 25°C

#### TECHNICAL CHARACTERISTICS OF THE RESIN AFTER UV CURING

Flexural strength (MPa) (ISO 10477)	> 100
Water sorption (µg/mm3) (ISO 10477)	< 10
Water solubility (µg/mm3) (ISO 10477)	< 1.4
Application/use	Permanent restorations

Product	Test cycles	Simulated years	Test results
Irix Max	1200000	5	None fractures observed

From the microscope pictures, no fractures are observed\*

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<sup>\*</sup>Internal data, chewing machine CS-4.4 SD Mechatronik

# IRIX® MAX

Technical Data Sheet

#### **ADVICE FOR USE**

Follow the operating instructions for your 3D printer in the model specified by DWS.

#### **RESTRICTIONS OF USE AND WARNINGS**

Irix® Max is a medical device that must be strictly used by specifically trained personnel (dental technician, dentist).

The clinician must take an accurate anamnesis of the patient before proceeding with the placement of the prosthesis.

Configured following the polymerization process, the prosthesis must be placed on the patient in a proper hygienic environment. Clean the device with a disinfectant solution prior to placement on the patient.

# **CONTROINDICATIONS**

An accurate anamnesis of the patient must be done, with the aim to identify potential intolerances or allergies to methacrylates.

# **SAFETY**

CODE

Device in liquid form may cause skin irritation, eye irritation, and skin sensitization.

Contact with the solidified material is not hazardous.

# PRECAUTIONS AND PROTECTIVE MEASURES

Avoid direct contact with skin and eyes, use protective goggles and nitrile gloves when handling the device.

In case of skin contact, wash with plenty of water and soap. If skin irritation or rash occurs, contact the doctor.

In case of eye contact, carefully rinse eyes with water for several minutes. If irritation persists, contact the doctor.

Detailed safety information is available in the MSDS at www.dwssystems.com.

# **STORAGE**

Store in a cool, dry place out of direct sun light or heat source. Store at  $5^{\circ}$  -  $30^{\circ}$ C.

# **DISPOSAL**

Refer to local regulations.

#### **INFORMATION FOR ORDERS**

DDODLICT

CODE	PRODUCT
10200437	IRIX MAX N, DLTY 1-2 U SIZE S, SET 5
10200438	IRIX MAX A1, DLTY 1-2 U SIZE S, SET 5
10200439	IRIX MAX A2, DLTY 1-2 U SIZE S, SET 5
10200440	IRIX MAX A3, DLTY 1-2 U SIZE S, SET 5
10200441	IRIX MAX A3.5, DLTY 1-2 U SIZE S, SET 5
10200442	IRIX MAX B1, DLTY 1-2 U SIZE S, SET 5
10200443	IRIX MAX N, DLTY 3-4 U SIZE M, SET 3
10200444	IRIX MAX A1, DLTY 3-4 U SIZE M, SET 3
10200445	IRIX MAX A2, DLTY 3-4 U SIZE M, SET 3
10200446	IRIX MAX A3, DLTY 3-4 U SIZE M, SET 3
10200447	IRIX MAX A3.5, DLTY 3-4 U SIZE M, SET 3
10200448	IRIX MAX B1, DLTY 3-4 U SIZE M, SET 3

CODE	PRODUCT
10200449	IRIX MAX N, DLTY 5-6 U SIZE L, SET 3
10200450	IRIX MAX A1, DLTY 5-6 U SIZE L, SET 3
10200451	IRIX MAX A2, DLTY 5-6 U SIZE L, SET 3
10200452	IRIX MAX A3, DLTY 5-6 U SIZE L, SET 3
10200453	IRIX MAX A3.5, DLTY 5-6 U SIZE L, SET 3
10200454	IRIX MAX B1, DLTY 5-6 U SIZE L, SET 3
10200455	IRIX MAX PHOTOSHADE, DLTY 1-2 U SIZE S, SET 5
10200456	IRIX MAX PHOTOSHADE, DLTY 3-4 U SIZE M, SET 3
10200457	IRIX MAX PHOTOSHADE, DLTY 5-6 U SIZE L, SET 3

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# **IRIX® PLUS**

Technical Data Sheet

# IRIX® PLUS: INNOVATIVE HYBRID COMPOSITE MATERIAL FOR PERMANENT RESTORATIONS

Irix® Plus is a photosensitive hybrid composite material for the customized production of permanent restorations such as: inlays, onlays, veneers, single crowns and bridges up to three elements by stereolithographic 3D printing.

Irix® Plus is a Class IIa CE marked medical device\*.

To meet aesthetic and functional requirements, Irix® Plus is available in different monochromatic shades and the exclusive adaptive gradient Photoshade.

Restorations made with Irix® Plus stand out for their aesthetics and high strength values. For perfect characterization, they can be customized with biocompatible products (lacquer, glaze, etc.) and/or light-curing colors. The so-configured prosthesis is a bespoke disposable medical device.



 $<sup>^{\</sup>star}$  Long-term invasive medical device in Class IIa according to Rule 5 of Annex IX, Dir. 93/42/EEC.

# **FEATURES**

- Superior surface quality
- High dimensional stability
- Precise fit
- Available in six shades: N, A1, A2, A3, A3.5, B1
- Available in Photoshade adaptive gradient technology (DFAB Chairside and DFAB Desktop only)

# **ADVICE FOR USE**

Irix® Plus is specifically developed for the use in DWS dental 3D printers XFAB 2500PD, XFAB 3500PD, DFAB Chairside, DFAB Desktop and LFAB.

Exclusively for DFAB Chairside and DFAB Desktop, the Photoshade technology provides adaptive gradient feature.

In order to increase the mechanical performances of the restorations and to guarantee their proper stability, the use of the specifically designed DCURE curing device with its thermal/UV post-treatment is recommended.

# **TECHNICAL CHARACTERISTICS OF THE LIQUID MATERIAL**

Environmental value for use	22°C - 27°C - max, RH 40% - 60%
Appearance / Color	Liquid / 6 shades available
Density	1,38 g/cm³
Viscosity	2500 ~ 3500 mPa•s at 25°C

# TECHNICAL CHARACTERISTICS OF THE RESIN AFTER UV CURING

Flexural strength (MPa) (ISO 10477)	> 100
Water sorption (µg/mm3) (ISO 10477)	< 40
Water solubility (µg/mm3) (ISO 10477)	< 1.4
Application/use	Permanent restorations

Product	Test cycles	Simulated years	Test results
Irix Plus	1200000	5	None fractures observed

From the microscope pictures, no fractures are observed\*

This document is reserved for healthcare professionals as it contains information on medical devices that may create situations of danger to the health and safety of the patient if not correctly read, understood and applied by a professional.





<sup>\*</sup>Internal data, chewing machine CS-4.4 SD Mechatronik

# Technical Data Sheet

#### **ADVICE FOR USE**

Follow the operating instructions for your 3D printer in the model specified by DWS.

#### **RESTRICTIONS OF USE AND WARNINGS**

Irix® Plus is a medical device that must be strictly used by specifically trained personnel (dental technician, dentist).

The clinician must take an accurate anamnesis of the patient before proceeding with the placement of the prosthesis.

Configured following the polymerization process, the prosthesis must be placed on the patient in a properly hygienic environment. Clean the device with a disinfectant solution prior to placement on the patient.

# **CONTROINDICATIONS**

An accurate anamnesis of the patient must be done, with the aim to identify potential intolerances or allergies to methacrylates.

# **SAFETY**

CODE

Device in liquid form may cause skin irritation, eye irritation, and skin sensitization.

Contact with the solidified material is not hazardous.

# PRECAUTIONS AND PROTECTIVE MEASURES

Avoid direct contact with skin and eyes, use protective goggles and nitrile gloves when handling the device. In case of skin contact, wash with plenty of water and soap. If skin irritation or rash occurs, contact the doctor. In case of eye contact, carefully rinse eyes with water for several minutes. If irritation persists, contact the doctor.

Detailed safety information is available in the MSDS at www.dwssystems.com.

# **STORAGE**

Store in a cool, dry place out of direct sun light or heat source. Store at  $5^{\circ}$  -  $30^{\circ}$ C.

#### **DISPOSAL**

Refer to local regulations.

#### **INFORMATION FOR ORDERS**

CODE	PRODUCT
10200461	IRIX PLUS N, TUBE, SET 2
10200462	IRIX PLUS A1, TUBE, SET 2
10200463	IRIX PLUS A2, TUBE, SET 2
10200464	IRIX PLUS A3, TUBE, SET 2
10200465	IRIX PLUS A3.5, TUBE, SET 2
10200466	IRIX PLUS B1, TUBE, SET 2
10200416	IRIX PLUS N, DLTY 1-2 U SIZE S, SET 5
10200417	IRIX PLUS A1, DLTY 1-2 U SIZE S, SET 5
10200418	IRIX PLUS A2, DLTY 1-2 U SIZE S, SET 5
10200419	IRIX PLUS A3, DLTY 1-2 U SIZE S, SET 5
10200420	IRIX PLUS A3.5, DLTY 1-2 U SIZE S, SET 5
10200421	IRIX PLUS B1, DLTY 1-2 U SIZE S, SET 5
10200422	IRIX PLUS N, DLTY 3-4 U SIZE M, SET 3
10200423	IRIX PLUS A1, DLTY 3-4 U SIZE M, SET 3
10200424	IRIX PLUS A2, DLTY 3-4 U SIZE M, SET 3
10200425	IRIX PLUS A3, DLTY 3-4 U SIZE M, SET 3
10200426	IRIX PLUS A3.5, DLTY 3-4 U SIZE M, SET 3
10200427	IRIX PLUS B1, DLTY 3-4 U SIZE M, SET 3

CODE	PRODUCT
10200428	IRIX PLUS N, DLTY 5-6 U SIZE L, SET 3
10200429	IRIX PLUS A1, DLTY 5-6 U SIZE L, SET 3
10200430	IRIX PLUS A2, DLTY 5-6 U SIZE L, SET 3
10200431	IRIX PLUS A3, DLTY 5-6 U SIZE L, SET 3
10200432	IRIX PLUS A3.5, DLTY 5-6 U SIZE L, SET 3
10200433	IRIX PLUS B1, DLTY 5-6 U SIZE L, SET 3
10200434	IRIX PLUS PHOTOSHADE, DLTY 1-2 U SIZE S, SET 5
10200435	IRIX PLUS PHOTOSHADE, DLTY 3-4 U SIZE M, SET 3
10200436	IRIX PLUS PHOTOSHADE, DLTY 5-6 U SIZE L, SET 3

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#### **DWS**

