			. 6					100			
		Areas of application	MDC*	Color	Viscosity	Flexural strength	Module of elasticity	Glass transition	Vickers hardness	Wave- length	Layer thickness
N/P	TOR- RINT Oto D	3D printed objects     of all kinds	-	clear • cobalt-blue • black**	920 ± 100 mPa·s	108 ± 4 MPa	3000 ± 100 MPa	93 ℃	-	385 nm	25 μm 50 μm 100 μm
MOR	Cast	Cast objects of all kinds	-	• purple	1000 ± 200 mPa·s	104 ± 3 MPa	2900 ± 200 MPa	86 ℃	-	385 nm	25 μm 50 μm 100 μm
MOS	Моф	Models     Model stumps     Models for splints and functional models	-	<ul><li>ash-gray</li><li>taupe-gray</li><li>smoky-black**</li><li>sand</li></ul>	950 ± 100 mPa·s	68 ± 2 MPa	1600 ± 100 MPa	-	-	385 nm	25 μm 50 μm 100 μm
MOD	Tray	<ul> <li>Individual functional trays and impression trays</li> <li>Bite registrations</li> <li>Transfer keys</li> <li>Base plates</li> </ul>	1	• aqua • hot-pink	900 ± 100 mPa·s	116 ± 10 MPa	2900 ± 300 MPa	91 °C	20 ± 1 HV0,2	385 nm	50 μm 100 μm 150 μm

## Printer compatibility overview

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

	MOR-PRINT Proto	MOR- PRINT Cast	MOR-PRINT Model	MOR- PRINT Tray	MOR- PRINT Surgical Guide (soon)	MOR- PRINT Surgical Guide HT (soon)	MOR- PRINT Splint (soon)	MOR- PRINT Splint flex (soon)
Carima IMD	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
W2P SolFlex / SolLab	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
VOCO SolFlex 650 / 350 / 170	<b>√</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	✓
Rapid Shape D20+ / D30+	0	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>
Asiga Pico / PRO / MAX / PRO 4K	✓	✓	0					
Ack uretta FreeShape 120	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>√</b>	✓	<b>✓</b>
DEKEMA trix print <sup>2</sup>	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>	<b>✓</b>	✓	<b>✓</b>

OParameters under evaluation





Morsa Sallinger GmbH Nordstraße 3 D-86381 Krumbach Deutschland Telefon: + 49 (0) 8282 800 44-0 Fax: + 49 (0) 8282 800 44-33 www.morsa-dental.de info@morsa.de

# 3D LIQUIDS

### 8.1 3D Printing Products





# **Production of Models**

# **MOR-PRINT Model**

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.



High Precision

#### **Product benefits**

- 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

### **Areas of application**

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

### **Material properties**

Property	Value	Test Method
Acrylate mixture		
Viscosity	950 ± 100 mPa·s	ISO 3219
End product		
Flexural strength	68 ± 2 MPa	ISO 178
Modulus of elasticity	1600 ± 100 MPa	ISO 178

DELIVERY FORM	COLOR
1000 g	<ul><li>ash-gray</li></ul>
1000 g	sand
**planned	

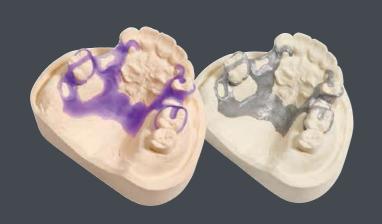
Order no. DH000 853 NB-814 Order no. DH000 853 NB-801

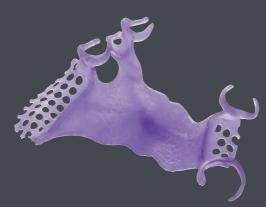
REF

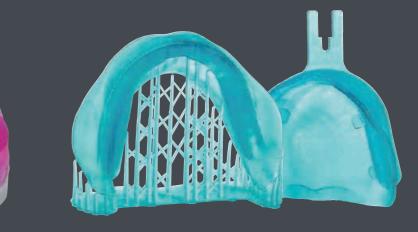
Designed for tray-based photopolymerisation at 385 nm

MOR-PRINT

8.2 3D Printing Products 8.3 3D Printing Products







# **Cast Objects**

# **MOR-PRINT Cast**

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



#### **Product benefits**

- 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



#### 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

#### **Material properties**

Property	Value	Test Method
Acrylate mixture		
Viscosity	1000 ± 200 mPa·s	is ISO 3219
End product		
Flexural strength	104 ± 3 MPa	ISO 178
Modulus of elasticity	2900 ± 200 MPa	ISO 178
Glass transition	86 °C	ISO 11357
Ash content	< 0,1 %	ISO 3451-1*
DELIVERY FORM	COLOR	*based on REF
1000 g	• purple Ord	der no. DH000 853 NB-815

# **Individual Impression Trays**

# **MOR-PRINT Tray**

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



Layer thicknesses up to 150 µm

#### **Product benefits**

- 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

### **Areas of application**

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

### **Material properties**

Property	Value	Test Method
Acrylate mixture		
Viscosity	900 ± 100 mPa·s	ISO 3219
End product		
Flexural strength	116 ± 10 MPa	ISO 10477
Modulus of elasticity	2900 ± 300 MPa	ISO 10477*
Glass transition	91 °C	ISO 11357
Vickers hardness	20 ± 1 HV0,2	ISO 6507-1*

DELIVERY FORM 1000 g 1000 g

COLORaquahot-pink

REF
Order no. DH000 853 NB-800

Order no. DH000 853 NB-804

\*based on

MOR-PRINT

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Designed for tray-based photopolymerisation at 385 nm

Designed for tray-based photopolymerisation at 385 nm