

## Transparent resins (Biothan)

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Resin	Hardener	Description	Mix.ratio Resin/ Hardener	Color	Shore	Wgt. kg/ dm <sup>3</sup>	Viscosity of mixture [mPa s]	Pot Life	Shrink	Applications
<b>Shore D</b>										
<b>2 MD 1775</b>	<b>M 330</b> <b>M 332</b>	Transparent Casting Resin with the highest UV- stability	1 : 1,5	glassy-clear	<b>75 - 78 D</b>	1,1	1700 - 2000	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 1***- 500 mm
<b>2 MD 1780</b>	<b>M 330</b> <b>M 332</b>	Transparent Casting Resin	1 : 1,5	clear	<b>77 - 80 D</b>	1,1	1200 - 1500	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 5 - 2500 mm
<b>2 MD 1784</b>	<b>M 330</b> <b>M 332</b>	Transparent Casting Resin temperature stability	1 : 2	trans- parent glassy	<b>82 - 84 D</b>	1,1	1600 - 1800	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 1***- 2500 mm
<b>2 MD 1785</b>	<b>M 330</b>	Transparent Casting Resin temperature stability	1 : 2,5	clear	<b>83 - 85</b>		2000 - 2300	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 1***- 25 mm , LED-Coating
<b>2 MD 1787</b>	<b>M 330</b>	Transparent Casting Resin high temperature stability	1 : 3	clear	<b>84 - 87</b>		2500 - 2800	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 1***- 25 mm , LED-Coating
<b>2 MD 1788</b>	<b>M 330</b>	Transparent Casting Resin the highest temperature stability	1 : 3	clear	<b>85 - 88</b>		2700 - 3000	1)	<0,1% ** (H=5)	Prototype parts Thickness of wall 1***- 25 mm , LED-Coating
<b>Shore A</b>										
<b>2 MA 1770</b>	<b>M 330</b> <b>M 338</b>	Transparent, elastic vacuum Casting Resin; dampness infinite	1 : 1	trans- parent glassy	<b>35 - 77 A<sup>2)</sup></b>	1,1	800 - 1000	1)	<1%*	Flexible models, LED - Coating and other transparent flexible parts
<b>2 MA 1790</b>	<b>M 330</b> <b>M 332</b>	Transparent Casting Resin UV-stable	1 : 1	trans- parent glassy	<b>60 - 80 A</b>	1,1	1200 - 1300	1)	<0,1%*	High volume castings
<b>2 MA 1795</b>	<b>M 338</b>	Elastic vacuum casting resin, humidity resistant	1 : 1	trans- parent glassy	<b>40 - 62 A<sup>3)</sup></b>	1,1	700 - 900	1)	<0,1%*	Also to be used as "melt-resin"

1) The transparent resins are available in different "speeds":

type	potlife (min)	deform (min)	work (hr)
<b>RSS</b>	< 5	15	2
<b>RS</b>	5-10	30	3
<b>S</b>	15-20	60	4
<b>N</b>	30-40	120	8
<b>L</b>	50-60	180	3 st 80°C
<b>XL</b>	80-100	300	3 st 80°C
<b>XXL</b>	> 120	>8h	3 st 80°C

Shrinkage tested on block size:

\* 1000 x 100 x 100

\*\* H x 120 x 250

\*\*\* All parts should be tempered for  
about 1-2h at 120°C

Potlife is determined with a 200 gr sample, thickness is 15 mm

2) By changing the resin to hardener ratio the Shore hardness can be adjusted from 40 A to 70 A

3) By changing the resin to hardener ratio the Shore hardness can be adjusted down to 78 A

**All transparent Casting Resins are free from special "dangerous" labelling requirements**