

elite® double

VINYLPOLYSILOXANE (ADDITION SILICONE)
DUPLICATING MATERIAL

elite® double 8

elite® double 16 fast

elite® double 16 extra fast

elite® double 22

elite® double 22 fast

elite® double 22 extra fast

elite® double 32

elite® double 32 fast

elite® double 32 extra fast

Zhermack®
TECHNICAL



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U113386/D Last Update 08/2010

elite® double 8-22-32
elite® double 16-22-32 fast

<p>1</p> <p>1:1 Base → Catalyst →</p>	<p>2</p> <p>60" 30"</p>
<p>3</p> <p>Working Time 30 cm</p> <p>DOUBLE 8-22-32: 10' DOUBLE 16-22-32 FAST: 5'</p>	<p>4</p> <p>Setting Time</p> <p>DOUBLE 8-22-32: 20' DOUBLE 16-22-32 FAST: 10'</p>

elite® double 16-22-32 extra fast
Automatic mixing only

<p>5</p> <p>Working Time</p> <p>DOUBLE 16-22-32 EXTRA FAST: 1'30"</p>	<p>6</p> <p>Setting Time</p> <p>DOUBLE 16-22-32 EXTRA FAST: 5'</p>
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ADDITION SILICONES (VINYLPOLYSILOXANES) FOR MODEL DUPLICATION

Elite Double is a complete line of A-silicones for model duplication for the dental laboratory. The 1:1 mixing ratio between Base and Catalyst makes measuring and mixing easy. Elite Double is suitable for mixing by hand or in a duplicating unit machine, because it has elevated fluidity and does not require a vacuum. Elite Double reveals details precisely, it has long term dimensional stability and is resistant to contact with various types of resins, investments and gypsums.

Elite Double 8: translucent, indicated for the duplication of small models or small details (e.g. dies in integral ceramic coating).

Elite Double 16 Fast: indicated for all duplication techniques.

Elite Double 16 Extra Fast: ideal for all duplication techniques (specific for duplicating unit machines).

Elite Double 22: ideal for all duplication techniques.

Elite Double 22 Fast: ideal for all duplication techniques.

Elite Double 22 Extra Fast: ideal for all duplication techniques (specific for duplicating unit machines).

Elite Double 32: indicated for the free expansion duplication technique of models with phosphatic investments.

Elite Double 32 Fast: indicated for the free expansion duplication technique of models with phosphatic investments.

Elite Double 32 Extra Fast: indicated for the free expansion duplication technique of models with phosphatic investments (specific for duplicating unit machines).

Indications and suggestions for different applications:

Application \ Product	Elite double 8	Elite double 16 fast	Elite double 16 extra fast	Elite double 22	Elite double 22 fast	Elite double 22 extra fast	Elite double 32	Elitedouble 32 fast	Elite double 32 extra fast
Duplication of dies in integral ceramic coating	x	x	x						
Duplication of models, generally in gypsum and/or resin		x	x	x	x	x	x	x	x
Duplication for models in controlled expansion investment materials		x	x	x	x	x			
Duplication for models in free expansion investment materials							x	x	x

RECOMMENDATIONS AND SUGGESTIONS BASED ON NECESSARY WORKING TIME:

Elite Double 8, 22, 32 are recommended to duplicate more models during the same working session;

Elite Double 16 Fast, 22 Fast, 32 Fast are recommended for duplicating one single model in the same working session;

Elite Double 16 Extra Fast, 22 Extra Fast, 32 Extra Fast can be used continuously for duplicating one or more models only with duplicating unit machines. They can not be employed with manual or vacuum mixing.

INSTRUCTIONS FOR USE

Preparing the model:

Before using Elite Double, check that the model to be duplicated is perfectly clean. If it needs milling, be sure to remove any oily residues; use of a solvent such as acetone is recommended. Wait for steam to evaporate, if used, and make sure that the model is perfectly dry.

Select a flask of appropriate size, then anchor the model onto its base with wax.

Batching and mixing with manual and vacuum technique:

(All the products except for all EXTRAFAST VERSIONS)

- 1) Measure or weigh equal amounts of Catalyst (white) and Base (coloured) in a graduated container (fig. 1).
- 2) Mix the two components well, until colour is even (fig. 2).

Important

Attention: Check that there are no un-mixed residues or strips of colour on the base and walls of the container.

Use:

Slowly pour Elite Double, preferably from a height of about 30 cm above the flask (fig. 3). It is not necessary to create a vacuum. If the quantity measured out is not sufficient to complete the duplication, wait until the silicone has hardened completely and then add more material in the same way. The material will bind perfectly and the addition will have no effect on the final result.

Use a jet of compressed air between the model and the mould created. Do not use mechanical force with a knife or other implement, and do not pull it away from the flask, or you may deform the mould (fig. 4).

Batching and mixing with duplicating unit machines:

Follow carefully the directions of the manufacturer. Do not invert base and catalyst in the machine (fig. 5-6).

We recommend the use of Elite Double at room temperature; low temperatures reduce the fluidity and enlarge the setting time, high temperatures reduce notably the setting time.

For times of mixing, working and setting, see the values in the table below.

Elite Double is compatible with all types of gypsums, investments or poured resins. We recommended Zhermack gypsum, type 4: Elite Stone and type 3: Elite Model/Model Fast. Use of a surface tension reducer (Tensilab - Zhermack) is recommended to aid the flow of water-based materials (gypsums, investments).

IMPORTANT RECOMMENDATIONS

Stick to an exact 1:1 ratio to ensure that timing is correct and the product's final properties are not altered. If using materials of different kinds such as die-spacers, resins, etc., you must wait for these products to stabilise completely to prevent a risk of inhibition of the polymerisation reaction. The surfaces with which the material comes into contact must be perfectly clean, grease-free and dry.

Close bottles after use, and do not switch their lids.

STORAGE

Guaranteed for 24 months if stored correctly between 5°-27°C (41°-80°F).

TECHNICAL DATA

	Elite Double 8	Elite Double 16Fast	Elite Double 16 Extra Fast	Elite Double 22	Elite Double 22 Fast	Elite Double 22 ExtraFast	Elite Double 32	Elite Double 32 Fast	Elite Double 32 ExtraFast
Color	Opaque pink	Violet	Lilac	Navy green	Orange	Grey	Apple green	Blie	Brick- red
Mixing ratio	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1
Mixing time manual*	1'	1'	(Only for Duplicating unit machine)	1'	1'	(Only for Duplicating unit machine)	1'	1'	(Only for Duplicating unit machine)
Mixing time with vacuum mechanical machine*	30"	30"	(Only for Duplicating unit machine)	30"	30"	(Only for Duplicating unit machine)	30"	30"	(Only for Duplicating unit machine)
Total working time*	10'	5'	1'30"	10'	5'	1'30"	10'	5'	1'30"
Setting time*	20'	10'	5'	20'	10'	5'	20'	10'	5'
Hardness (Shore A after 24 h)	8	16	16	22	22	22	32	32	32
Detail reproduction	20 µm	20 µm	20 µm	20 µm	20 µm	20 µm	20 µm	20 µm	20 µm
Dimensional variation	- 0,05%	- 0,05%	- 0,05%	- 0,05%	- 0,05%	- 0,05%	- 0,05%	- 0,05%	- 0,05%
Tensile strength	2 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²	2,5 N/mm²
Elongation	380%	550%	550%	450%	450%	450%	350%	350%	350%
Tear strength	2,5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²	5 N/mm²

*The times mentioned above are intended from the start of the mixing phase at 23°C (73°F).

IMPORTANT REMARKS: Consulting services on the use of our products, provided in any form, be that verbal, written or through demonstrations, are based upon the current state of dentistry and of our know-how. They are to be considered as non-binding information, also in relation to possible third party claims, and do not exonerate the user from personally checking whether the product is suitable for the planned use. Use and application by the user take place under no possible control by the Company, and are therefore under the user's responsibility. Possible liability for damages is limited to the value of goods supplied by the Company and utilized by the user.