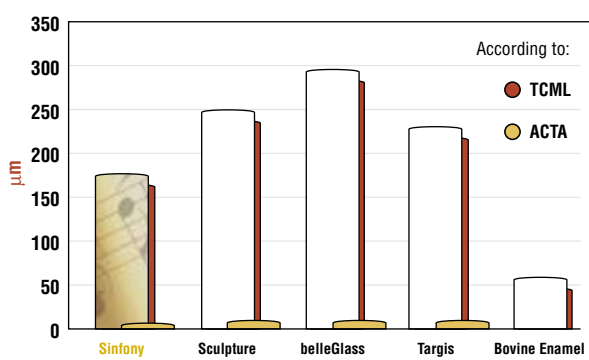




# Sinfony™

## Indirect Lab Composite

The study results presented here demonstrate clearly the strength, beauty and versatility of Sinfony indirect lab composite.

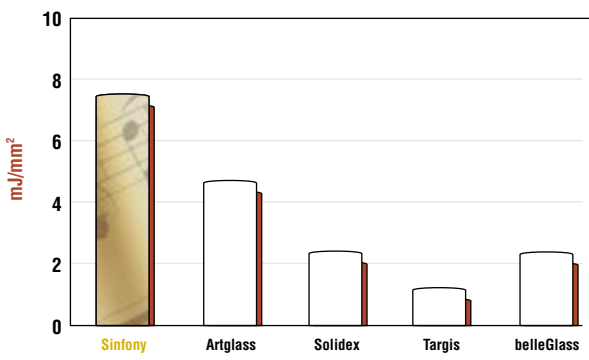


### Abrasion of Indirect Composites

**E. Hoffman, M. Rosentritt, M. Behr, G. Handel**

*Department of Prosthetic Dentistry, University of Regensburg, Germany: Abrasion of indirect composite restorations after artificial abrasion in the mastication simulation in a three-media-wear machine. (DGZPW Abstracts #11) 2000.\**

Both in the mastication simulator machine and in the three-media-wear machine, Sinfony indirect lab composite showed significantly less abrasion than belleGlass, Sculpture, and Targis.



### Impact Strength

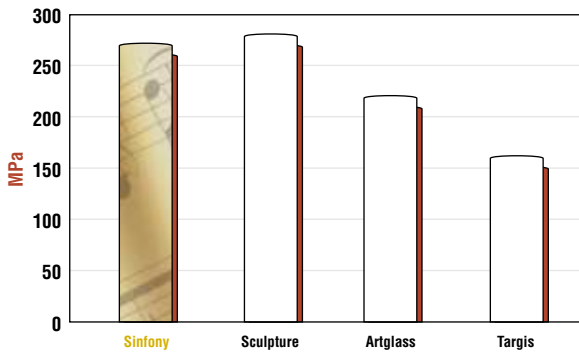
**DIN 53 453, Transverse Impact Test\***

At 7.5 mJ/mm², Sinfony indirect lab composite surpasses other modern materials, such as Solidex, belleGlass, and Targis.

\*These studies were sponsored by 3M ESPE AG.



# Sinfony™ Indirect Lab Composite

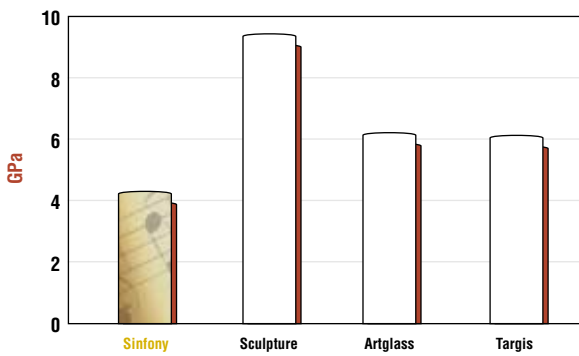


## Compressive Strength

**C. Trajtenberg, M. Eldiwany, D. Li, J. M. Powers**

*Houston Biomaterials Research Center, UT-Houston Dental Branch, Houston, Texas, USA: Properties of Advanced Laboratory Composites. (IADR Abstracts #413) 1999.\**

Demonstrates that Sinfony indirect lab composite has significant advantages in compressive strength over two out of three competitive materials.

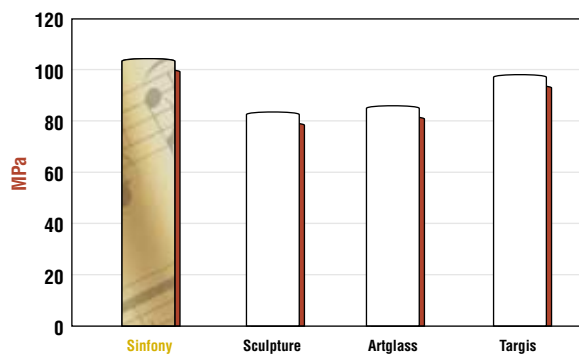


## Flexural Modulus

**C. Trajtenberg, M. Eldiwany, D. Li, J. M. Powers**

*Houston Biomaterials Research Center, UT-Houston Dental Branch, Houston, Texas, USA: Properties of Advanced Laboratory Composites. (IADR Abstracts #413) 1999.\**

Designed with a lower flexural modulus, Sinfony indirect lab composite is less brittle than other composites, making it an ideal material for veneering over flexible understructures such as fiber bridge substrates or telescope crowns.

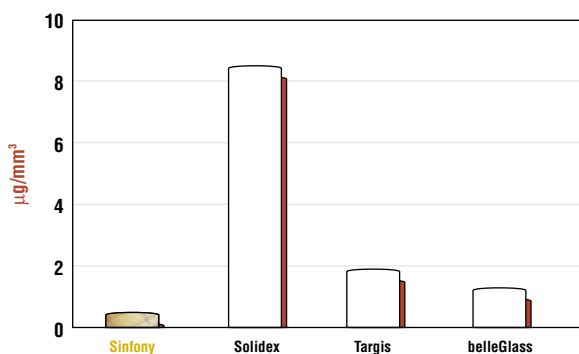


## Flexural Strength

**C. Trajtenberg, M. Eldiwany, D. Li, J. M. Powers**

*Houston Biomaterials Research Center, UT-Houston Dental Branch, Houston, Texas, USA: Properties of Advanced Laboratory Composites. (IADR Abstracts #413) 1999.\**

Sinfony indirect lab composite's flexural strength was tested and measured to be higher than other popular brands.

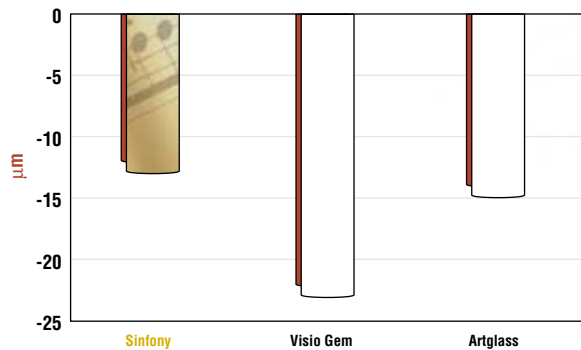


## Solubility

**C. Trajtenberg, M. Eldiwany, D. Li, J. M. Powers**

*Houston Biomaterials Research Center, UT-Houston Dental Branch, Houston, Texas, USA: Properties of Advanced Laboratory Composites. (J. Dent Res, Vol 78 #929) 1999.\**

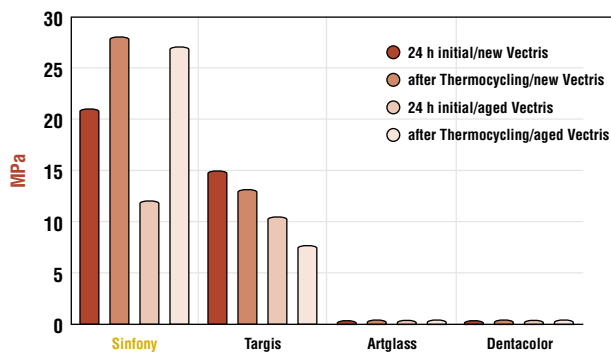
In a test of solubility, which is associated with water repellence of the polymer matrix, Sinfony indirect lab composite is clearly superior.



### Toothbrush Abrasion

#### 3M ESPE internal test results

A toothbrush abrasion study showed abrasion resistance of the ultrafine particle composite of Sinfony indirect lab composite.



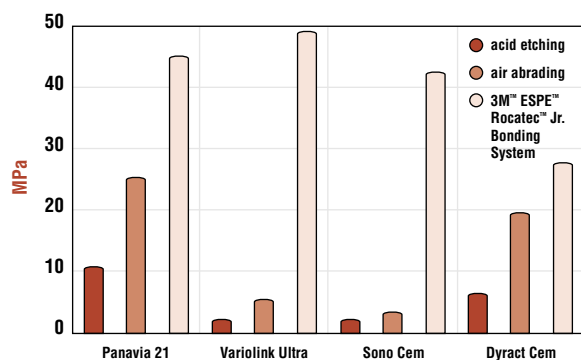
### Shear Bond Strength

(after 24 hours water storage or thermocycling–TC)

T. Frauenholz, M. Rosentritt, M. Behr, R. Lang, G. Handel

Department of Prosthetic Dentistry, University of Regensburg, Germany: Determination of shear bond strength of composites on fiber-reinforced FPD material. (IADR Abstracts #1486) 1998.\*

Repairing of new and aged Vectris material was simulated via *in vitro* shear tests. Sinfony indirect lab composite is suitable for repairing—also on aged samples, whereas Artglass and Dentacolor showed no adhesion at all.



### Shear Bond Strength

(to In-Ceram thermocycling)

H.N. Alkumru, M. Özcan, I. Negriz, D. Gemalmaz, A. Akkaya

Marmara University, Faculty of Dentistry, Istanbul, Turkey, and Medical and Dental School of Köln, Germany: Effect of Surface Treatment on the Bond Strength of Luting Cement to In-Ceram. (IADR Abstracts #2238) 1998.\*

Tribochemical coating with Rocatec increased significantly the bond strength of luting cements (composite and compomer) to In-Ceram in comparison to acid etching or air abrading.

\*These studies were sponsored by 3M ESPE AG.

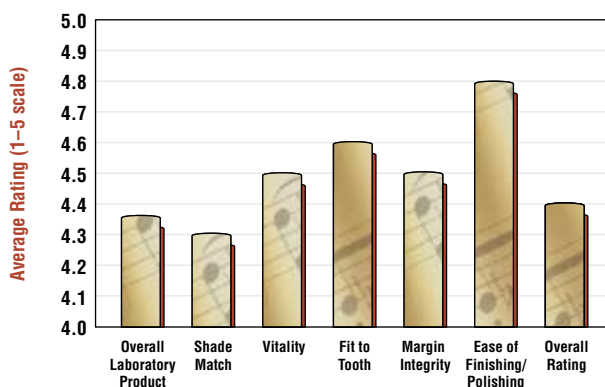
# Sinfony™ Indirect Lab Composite

Product	Filler %		Average Particle Size (µ)	Curing Method	Reinforcement Fiber
	Weight	Volume			
belleGlass HP KerrLab	74.0-87	56-72.5	0.5	Light Heat Pressure	Connect
Sculpture	77.5	68	0.6	Light Heat Vacuum	FibreKor has glass fibers pre-impregnated with resin
FibreKor Jeneric/Pentron	60.0	41			
Sinfony	50	N/A	0.6	Light Vacuum	N/A
Targis/Vectris Ivoclar-Williams	78	N/A	0.7	Targis Light Heat Vectris Light Pressure Vacuum	Vectris has pre-impregnated glass fibers

## Indirect Resin Systems — Reality's Choices

Reality Publishing Co., Vol. 15, 2001

Testing found Sinfony indirect lab composite to have very good esthetics and to be easy for the lab to fabricate.

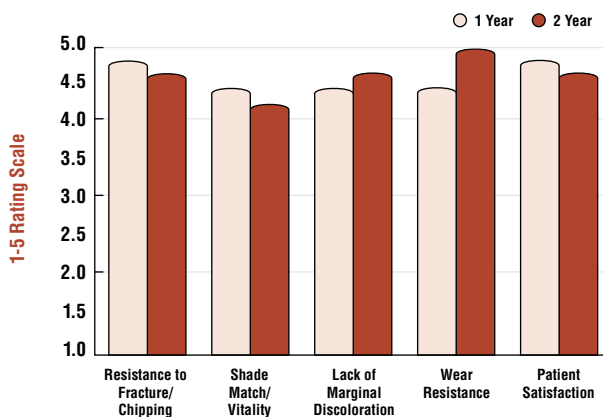


## Insertion of Sinfony Indirect Lab Composite

++++1/2

The Dental Advisor, Vol. 18, 2001

Clinicians were very pleased with the clinical performance of Sinfony indirect lab composite, rating the “ease of finishing/ polishing” very high.



## Two-Year Recall of Sinfony Lab Indirect Composite

++++1/2

The Dental Advisor, Vol. 19, 2002

Overall, clinicians rated Sinfony indirect lab composite in the very good to excellent range for two-year recall, with high marks for “resistance to fracture/chipping” and “patient satisfaction.”

3M ESPE Dental Lab Technical Hotline: 1-800-216-9502  
3M ESPE Web site: [www.3MESPE.com](http://www.3MESPE.com)

**3M ESPE**

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