

# SCIENTIFIC REPORT

## x-tra fil – Evaluation by PREP Panel

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The PREP Panel (Product Research and Evaluation by Practitioners) is an independent organisation with its main office in Birmingham, England. PREP allowed dentists in Great Britain to test x-tra fil. It then gathered the results of this user survey and published the findings.

### Results of the PREP Panel evaluation<sup>[1]</sup>

The PREP Panel is a group of 30 experienced dentists that test new material and products used in routine dentistry. The results of nearly 400 restorations flowed into the evaluation of x-tra fil.

The evaluation of the individual criteria followed the chronological course of treatment, beginning with the enclosed pictogram. On a scale of 1-5, with 1 being poor and 5 being excellent, x-tra fil received a rating of 4.9.

#### Pictogram



The application and modeling of the restorative were given an average grade of 4.5, with 1 standing for difficult and 5 standing for easy.

#### Application and modeling



In order to describe the material more exactly, the flow behaviour (1 = unsatisfactory, 5 = very satisfactory) and viscosity (1 = too thin, 5 = too viscous) were also scrutinized. X-tra fil received an average rating of 4.5 in flow behaviour. A score of 3.2 was determined in the assessment of the viscosity - the material thus was attested to having a nearly perfect consistency (correlates to a score of 3). 92% of the practitioners additionally certified that it also exhibits excellent polishability.

#### Flow behaviour



## Viscosity



The aesthetic appearance of the finished restoration was given a grade of 3.6. This grade is more than acceptable, considering that there is only one universal shade and the fact that the cost-effectiveness and not the aesthetics was the central focus of the development.

## Aesthetics



X-tra fil received a grade of 4.4 in an overall rating of user friendliness. This is noteworthy, since the test dentists had given an average score of 4.1 to composites they had tested prior to this evaluation.

## User friendliness



The test report contained a few quotes from the dentists at the end:

"This is the only material with a translucence that imitates natural enamel. [...]"

"Excellent in small Class I and II cavities"

"Good contact points are easy to achieve with this material."

"Surface details can be achieved with considerable ease before hardening."

"[...] - quick and effective"

**Conclusion: The test dentists consistently gave X-tra fil good grades, with 69% stating that they would purchase this product.**

[1] F. J. T. Burke, R. J. Crisp, *A practice-based evaluation by the PREP Panel of Voco Xtra Fil*, Dental Practice, April 2009.