# Dental PRODU SHOPPER

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# **16**P **REASONS TO USE** AN **ALGINATE SUBSTITUTE**









**CHOOSING** THE BEST **MATERIAL FOR DIAGNOSTIC IMPRESSIONS** 

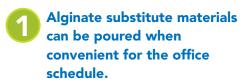
LEE ANN BRADY, DMD P.7



# T<sub>5</sub>P

**REASONS TO USE** 

AN **ALGINATE**SUBSTITUTE



One of the biggest challenges with alginate diagnostic impressions is that the material is most accurate immediately after removal from the mouth the longer the delay between taking the impression and pouring it up, the less accurate the stone model. We try and preserve the accuracy by wrapping the alginate impression in a moist paper towel, which is messy and will still dry out, just more slowly. Another alternative is to store the impression in humidity, which requires a plastic container and lots of counter space. Alginate substitute materials like xantasil are stable in a dry environment and can be set in a lab pan until the office team has time to pour the model.



## Alginate substitute impressions can be poured multiple times with consistent accuracy.

Often we want or need multiple stone models for the same patient and want to be able to accomplish this without putting the patient through multiple sets of impressions. Alginate is at its best the first pour, and although some alginates can be poured a second time, the model accuracy diminishes. The other challenge can be that the alginate impression itself is damaged when the first model is separated and cannot be poured again. Alginate substitute impressions can be poured over and over and produce many copies of the same model with consistent accuracy.

Alginate substitute impressions are stable over time.

There are times in every practice where a stone model breaks unexpectedly or we decide we need a duplicate model days or weeks after the original models have been poured, xantasil impressions are stable for an extended period of time after they are taken. In our office, we save the impressions in a lab pan or the patient's model box. If we break a model or decide we need a duplicate, the impression can simply be taken again.



#### Consistent accuracy without measuring and weighing.

Alginate can be a highly accurate material when used following the guidelines for exact quantities of water and powder. The challenge is that often the 2 ingredients aren't used in the correct proportions. This not only alters the set time but also diminishes the accuracy of the impression. Alginate substitute materials do not require mixing powder and water. There is some measuring, but no weighing and no mixing in a bowl. This means consistent accuracy with ease every time.



One material with multiple clinical uses.

Alginate substitute materials can be used for a variety of clinical situations above and beyond diagnostic impressions. Xantasil impressions can be used to fabricate night guards, occlusal appliances, orthodontic retainers, sports quards, and bleaching trays. The material can also be used to take a matrix impression for provisional fabrication and the opposing model for restorative procedures.







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PRACTICE 298

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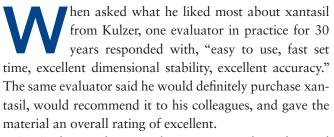
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**KULZER** 

# xantasil

#### **ALGINATE SUBSTITUTE**

Kulzer's xantasil produces impressions with low final hardness, high strain in compression, and long-term dimensional stability.



An A-silicone alginate substitute, xantasil can be used for all anatomic impression indications for which traditional alginates would typically be used (temporaries, orthodontic models, opposing jaw models, and splints), while offering several advantages.

#### **Pouring Behavior**

Manufacturer Description: Because of its dimensional stability, xantasil can be poured multiple times, pouring can be delayed without sacrificing accuracy, and it can be stored safely for several weeks.

Evaluator Feedback: All 11 evaluators who rated quality of the material (pouring behavior) rated this feature as excellent or very good. A dentist in practice for 32 years described the alginate substitute as "stable for a long time before pouring up the model," and a dentist with 20 years of experience identified "stability of the material after the



impression" and "low file during the impression—less gagging" as the features he liked most.

#### **Delivery and Handling**

Manufacturer Description: As a ready-to-use, automix material, xantasil requires fewer working steps than alginates, and produces a mix that is both homogenous and void-free. Hygienic processing eliminates dust and the need for cleanup, and the ability to dispense the right amount of material with each use reduces waste.

Evaluator Feedback: Several evaluators commented on delivery, such as one dentist who identified her favorite features as "no mixing with water," and another who cited "ease of use with gun-type mixing right into the tray" as the feature he liked most. One dentist commented on the "extremely convenient delivery system," and another called it "much simpler and less messy than alginate."

With remarks such as, "good viscosity to eliminate patient gagging," and, "The material does not run like traditional alginate," 12 of the 13 evaluators rated viscosity as excellent or very good. One of those evaluators noted, "The consistency could be more creamy." Several evaluators also commented on the reported 1-minute working time and 1.5-minute intraoral time, noting the "fast set," and reporting that it "has



Stable for a long time before pouring up the model. Susan Frank, DDS

Wood Dale, IL







The consistency could be more creamy. William A. Simon, DMD Chicago, IL







Much simpler and less messy than aliginate. Matthew Giunta, DMD Tampa, FL





a good setting time." When asked what they'd like to see improved, one dentist called the working and setting time "too short," and another said he'd prefer a "faster set time for the 'gagger' patient." Eleven evaluators rated working and setting time as excellent or very good.



#### Impression Detail and Accuracy

Manufacturer Description: xantasil produces impressions that are easy to trim and remove from the mouth, and offer the advantages of low final hardness, high strain in compression, improved detail accuracy, high surface quality, and longterm dimensional stability.



Evaluator Feedback: An evaluator who said he would definitely purchase the material and recommend it to colleagues said it was "quite easily removed from the mouth." Several evaluators identified characteristics related to impression quality as among the features they liked most, such as one dentist who reported "nice impression

detail," and another who reported "excellent accuracy." One dentist noted that, "I did have one incidence...of distortion."

#### **Overall Satisfaction**

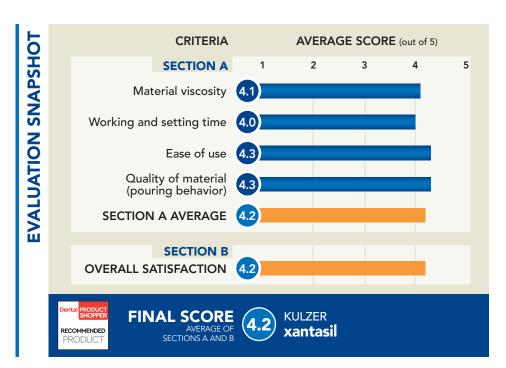
With comments such as, "It's as good as any competitor's equivalent product," all 13 evaluators rated their overall satisfaction with xantasil as excellent or very good. An Illinois dentist who rated the material as excellent noted that it, "seems to be a very nice material, especially for use in edentulous cases," and a New Jersey dentist who said he would probably purchase and recommend xantasil said, "I can see it being very useful to have around to use on a gagger. I could also see

this as a useful product to help fabricate temporized [restorations]." Another Illinois dentist, who said she used the material for pre-prep impressions for crowns, noted, "It supported the temporary crown material well and helped us make nice temp crowns,"

Several evaluators noted that cost is a prime consideration when deciding whether to replace an alginate with an alginate substitute. "If the pricing is competitive, count me in!" said a Pennsylvania dentist who rated all features as excellent.

#### FOR FREE INFORMATION:

800.431.1785 www.kulzerus.com



**BACK TO COVER** 



# CHOOSING THE BEST MATERIAL FOR DIAGNOSTIC IMPRESSIONS



Lee Ann Brady, DMD

apturing accurate, efficient, cost-effective diagnostic impressions is a routine part of every dental practice. These impressions are taken for study models, opposing models during crown and bridge, and fabrication of appliances. One of the considerations in choosing materials is the systems of our office. For example, most diagnostic impressions are taken by a chair-side assistant as a single operator. Therefore a material that requires 2 operators to be used appropriately is not a good fit for diagnostic impressions. Another factor, of course, is the patient experience. Most patients tolerate impressions at best, and limiting the number of times we have to repeat the process is better from their perspective. With this in mind, we use a material that can capture a detailed impression the first time, is not technique sensitive, and can be poured multiple times while maintaining its accuracy.

The most common material used is alginate, although alginate substitutes are taking over for good reason. Let's compare the pros and cons of xantasil, alginate substitute and traditional alginate.

	xantasil Alginate		
Operators	One	ne One	
Time Before Pouring	Unlimited	Immediate	
Number of Pours	Unlimited	One	
Mixing	Automix	mix Hand Mix	
Stability	Excellent	Poor	
Accuracy	Excellent	Good	







#### Award Winner!

THE DENTAL ADVISOR www.dentaladvisor.com

RATINGS:

Excellent + + + + +
Very Good + + + +
Good + + +

#### +++1/2

## **Xantasil**

Kulzer 800-431-1785 www.kulzerUS.com

#### Description

*Xantasil* is a medium-viscosity, VPS impression material designed as a substitute for alginate that allows for multiple pours and storage of impressions for several weeks. Common uses for *Xantasil* include templates for provisional restorations, orthodontic models, retainers, splints, and opposing models.

**Xantasil** is available in 50 mL automix cartridges and 380 mL cartridges compatible with motorized mixing machines. **Xantasil** has a working time of one minute and a setting time of

Suggested Retail Cost

6, 50mL cartridges ...\$68.30

2, 380 mL cartridges\$128.00

1:30 in the mouth. *Xantasil* was evaluated by 26 consultants in 365 uses. This alginate substitute received a 91% clinical rating.

#### **Product Features**

The ability to delay pouring and to create multiple models from *Xantasil* impressions make it more useful than alginate for many purposes. The material is easy to extrude and seat in the mouth with a reasonably short setting time. *Xantasil* captures good detail; however, occasional voids at cervical areas beyond the height of contour were observed. The light orange color is easy to read. Stone models are easy to separate from the impressions and they have smooth surfaces. Appliances fabricated on models from *Xantasil* were reported to have an accurate fit.



#### Consultants' Comments

"Works great as a matrix for making a temporary crown."

"Impressions turned out nicely each time!"

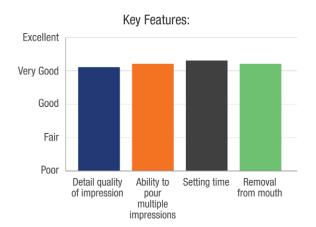
"I won't go back to alginate."

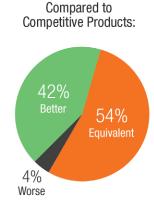
"Models from multiple pours are identical."

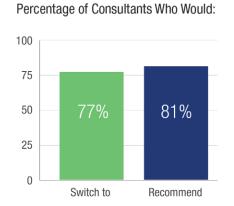
"The dynamic mixer is more practical than the automix cartridges for full-arch impressions."

#### Clinical Tips

- Seat the impression vertically to avoid distortion.
- Wait 30 minutes before pouring stone into the impression.







**BACK TO COVER** 







#### xantasil® – the alginate substitute enhancing office efficiency.

This A-silicone alginate substitute ensures robust impressions every time, every day. Not only can you pour the impression **later**, you can **pour it multiple times**. Why? Because of its impressive dimensional stability, which reduces the time pressure from subsequent working steps. xantasil® also eliminates the need to take several impressions, which your patients will appreciate as much as you will.

Giving a hand to oral health.

#### xantasil® alginate substitute

#### Dimensional stability makes a lasting impression.

### The superior substitute for traditional alginates. It's all you need for anatomical impressions

xantasil® covers all anatomical impression indications for which traditional alginates would typically be used, such as impressions for temporaries, orthodontic models, opposing jaw models and splints.

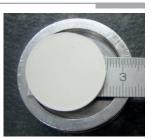
#### Impressive dimensional stability



Reference form with ruler.



xantasil® shrinkage behavior after several weeks.



Leading alginate competitor shrinkage behavior after **24 hours**.

Source: R&D Heraeus Kulzer. Storage conditions in accordance with ISO 4823. Data available.

Product	Mixing time (sec)	Working time (mins)	Time in mouth (mins)	Deformation under pressure (%)	Shore A hardness
xantasil Dynamix Fast Set	auto	01:00	01:30	5	50
xantasil Cartridge Fast Set	auto	01:00	01:30	7	45

#### Impressive advantages.

#### Long-term dimensional stability

- More flexibility and convenience for pouring models without time pressure.
- Suitable for delayed pouring without loss of accuracy.
- Allows multiple pours from one impression.
- Improved detail accuracy compared to traditional alginates.
- Can be stored for several weeks.

#### **Automatic mixing**

- Compatible with the Dynamix speed mixer.
- Excellent void-free, homogenous mix quality.
- Hygienic processing with no dust or clean-up.
- Ready-to-use material saves time as much fewer working steps are required compared to alginates.
- Less waste dispense just the right amount of material each time.

#### High surface quality

- Optimized gypsum pouring behavior.
- Minimized trimming of models and polishing of provisionals.

#### Low final hardness, high strain in compression

- Easy to trim the impression.
- Easy mouth removal of the impression.
- Easy model removal from the impression.



#### xantasil®

xantasilDynamix Fast Set (2 x 380ml Cartridges, 2 Dynamix mixing tips, 1 fixation ring)66052101xantasilFast Set Cartridge Refill (6 x 50ml and 6 green mixing tips)66052102