

Imprint™ 4 Clinical Reviews

Dr Michael Mandikos BDS (Hons) M.S. Cert. Pros, FRACDS
Brisbane, QLD

In the early 2000's, we saw the emergence of what was referred to as the "new" polyvinyl siloxane materials when products such as Affinis, Virtual, Take One Advance and Imprint 3 came to the market. I had been a long time



user of the Express wash material from 3M ESPE and was not convinced that PVS materials could get any better.

Shortly after, I read a study conducted in the Undergraduate clinic of Louisiana State University by Sadan, Blatz and Burgess, and the conclusion was that the improved handling characteristics and addition of better surfactants in Imprint 3 as compared to Express, meant that students were 8 times less likely to need to retake impressions, simply because of the improved material. I decided to try Imprint 3, and have been a happy user ever since.

It is interesting how history repeats. Some 10 years later, I was asked to trial Imprint 4. My immediate question was "What could be better in this new version?" After all, I already had nice handling, very light bodied material, that behaves in quite a hydrophilic manner, and I don't miss too many impressions ever with this product.

What is there left to improve. Well as it turns out, there are several significant improvements in the Imprint 4 Material.



Specifically, it has still further refinements in its rheostatic properties. It is very low in viscosity, but feels almost runny as it is extruded through its narrow syringe tip due to improved sheer thinning ability. So this material

goes much better into the retracted gingival sulcus, and spreads out and better "wets" the tissues as you extrude it and then air thin it. This handling is quite amazing.



A second major improvement is the set time. All PVS materials on the market offer "Regular set" and "Fast Set" - but the latter comes with a shortened working time. Imprint 4 has a normal amount of working time (about 1 minute) and then a very fast subsequent set time of only 2 minutes. This has been achieved through refinements in chemistry and an innovative exothermic



reaction that warms the material as it polymerises, thus also accelerating the set.

Finally, there is the long requested and finally delivered improvement in colour. The new Imprint 4 colour combinations between light and heavy body make for impressions that are much easier to read, thus confirming clinical accuracy.

I have been using Imprint 4 now for only a few months, but I can say that it makes it very hard to miss an impression now. Every now and then a new product comes along that makes dental life easier and more predictable. Imprint 4 is one of those materials. I would have no hesitation in recommending it to my colleagues.



Dr Jim Ironside BDS, MDS, PhD
Prosthodontist Adj. Assoc. Professor (CSU)

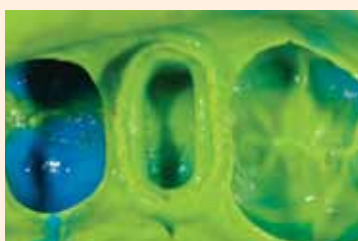
I have been using the new Imprint 4 material for about 2 months so far. I have found it to be an accurate and easy material to work with. The wash material produces an easily read margin when used in a dry field. The flow characteristics are similar to the previous material I was using so it was not hard to become accustomed to Imprint 4.

The yellow tray material is particularly impressive. It flows more easily than others I have used and sets to produce a quite rigid support for the wash material. The result is that the crowns and bridges are fitting as well as before, there has been no loss in quality.

As an impression for implant superstructures it is also extremely good with very little if any apparent distortion. Overall in custom or stock trays the material handles very well with predictable accuracy and results.



Dr Clarence Tam HBSc, DDS
Cosmetic and General Dentistry, 18 Morrow Street
Newmarket, Auckland



“3M has developed a material that has the dimensional accuracy and stability of the trusted Imprint 3 system with increased hydrophilic properties, allowing for more complete adaptation in a slightly moist sulcus. Both the regular wash and light wash materials are extremely easy to apply to the marginal region, and the working time allows for stress-free application. The combination of colours contrast ideally with the regular heavy body tray material, allowing for clear, precise margin recognition and identification.

The slightly exothermic reaction during the intraoral phase allows for an accelerated set, thus minimizing any discomfort. The traditional dysgeusia induced by other PVS materials has been rectified by the introduction of a pleasant mint flavour. The short working time and clinical precision of this material will accelerate your clinical practice, increase margin definition and thus enhance the quality of your crown/bridge/implant work.”

Case 2

