



## Smiles should be BPA free

It's true that BPA (Bisphenol-A) can be harmful in large doses. But at Ultradent, our philosophy is why take the risk? We've been creating award-winning sealants and composites for over 20 years. And we've never used ingredients that contain BPA in any of them. And we never will.

# The <sup>1</sup>H History of BPA

1891

BPA is first produced. Its initial uses were to enhance the growth of cattle and poultry and to act as an estrogen replacement for women.



1950s

BPA becomes widely used in the production and manufacturing of plastic bottles, metal cans, and other common items.



1970s

Concerns over the safety of BPA increase as new research shows possible harmful side effects.



1996

An infamous study called the Granada Study is published, showing that Bis-DMA-based sealants release BPA in the mouth. This study made many glaring errors, leading people to believe that all sealants use the same chemistry as the one and only sealant the researchers tested.



Since 1978

Ultradent manufactures our first resin-based compound. From the very beginning, Ultradent has been aware of the risks associated with BPA. And we've **never** used materials that contain BPA in any of our dental products.



## "Bis" is not <sup>5</sup>B ad...

Over the years, as people became more aware of the risks associated with bisphenol-A, they also became wary of any compound with "bis" in its name. But "bis" is not bad!

### bis\bis\ prefix (from Old Latin *divis*)

1: two

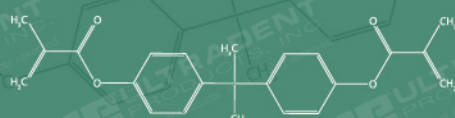
2: symmetrical



Just as a bicycle has two symmetrical wheels, chemical compounds that have "bis" in their names contain two symmetrical halves.

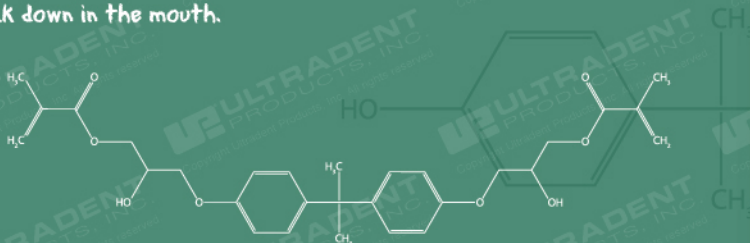
### BIS-DMA (BISPHENOL-A DIMETHACRYLATE)

For a period of time, some dental manufacturers used a compound called Bis-DMA in their sealants and resins. When Bis-DMA reacts with saliva, it breaks down into BPA, which makes it unsuitable for dental composites and sealants. Because of this, Ultradent **does not** use Bis-DMA in our products.



### BIS-GMA (BISPHENOL-A DIGLYCIDYL ETHER METHACRYLATE)

Bis-GMA is a highly stable compound that is used by a variety of manufacturers. Developed properly, the structure of Bis-GMA molecules is formed in a way that won't break down in the mouth.



## ...when made <sup>15</sup>P roperly



### What does "made properly" mean?

There is more than one way to make Bis-GMA. Some manufacturers make it by reacting BPA with another chemical compound. Because BPA is one of the reactants in this chemical process, there will always be some residual BPA in the Bis-GMA that's created.

Other manufacturers make Bis-GMA without ever using BPA in the reaction. Because BPA is never part of the equation, the Bis-GMA that is produced does not contain even trace amounts of BPA.

Ultradent uses an ultrapure source of Bis-GMA in our sealants and composite resins that has been third-party tested to ensure it's free of BPA contamination.



UltraSeal XT plus  
For: Sealing pits and fissures in posterior teeth

BPA free



UltraSeal XT hydro  
For: Sealing pits and fissures in posterior teeth



Vit-I-escence  
For: Restoring teeth to a completely lifelike level



Amelogen Plus  
For: Restoring teeth with a simple, easy-to-use system



PermaFlo  
For: Creating a superadaptive initial layer between a restoration prep and a layer of composite



**ULTRADENT**  
PRODUCTS, INC.