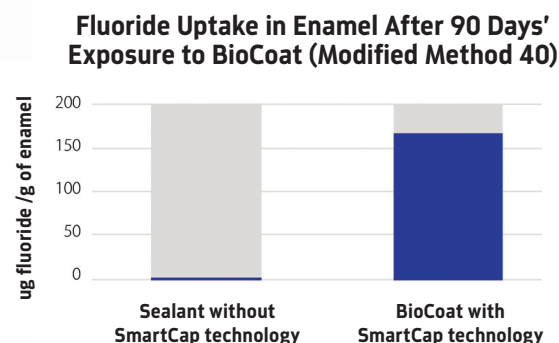


PREMIER DENTAL

BioCoat bioactive resin pit and fissure sealant



Dental caries is a prevalent problem, especially among children. Evidence-based recommendations support the use of pit and fissure sealants to help prevent and control dental caries.

Until now, pit and fissure sealant protection has primarily been used as a physical barrier. This has changed, thanks to a partnership between Premier Dental and Creighton University that brought together their technological expertise and innovative ideas to devise a new cutting-edge technology. The result of this union, patented SmartCap technology, enables BioCoat pit and fissure sealant to do more than just create a physical barrier—it offers relentless protection.

BioCoat contains semipermeable resin microcapsule branded SmartCap technology. The microcapsules are loaded with ionic solutions of calcium, phosphate and calcium, which can diffuse in and out of the sealant. Enamel in contact with and adjacent to BioCoat benefits with greater fluoride uptake in the presence of calcium and phosphate ions. In premarket research, this fluoride delivery was demonstrated on tooth surfaces adjacent to the sealant. The extended release of ions supersaturate the oral environment around the enamel to continuously support the remineralization process and provide an extra line of defense against demineralization during acid attacks.

This heavily filled resin sealant provides an effective barrier on occlusal surfaces of primary and permanent molars. The high

filler content provides excellent long-term resistance to wear, with a compressive strength comparable to flowable composites. The filler also lowers polymerization shrinkage, which protects against gap formation along the margins when cured. The resin formula is very resistant to oral solubility, which is a problem glass ionomer and resin-filled glass ionomers sealants cannot overcome. When dispensed, BioCoat's thixotropic property allows for bubble-free, deep penetration into the tightest pits and fissures for excellent adaptation and adhesion to the enamel.

The release of bioavailable remineralization ions occurs without any deleterious effect to the resin sealant, and is ongoing. Testing has demonstrated extended release of fluoride and remineralization ions while the SmartCap microcapsules can recharge.

Premier's BioCoat bioactive resin pit and fissure sealant provides relentless protection, outstanding adhesion and extended fluoride release. ■

For more information, visit premusa.com.

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for daily dentistry™