

# Clinical Compatibility Statement

## Proven Compatibility of Aluminum Sulfate, Ferric Sulfate, and Aluminum Chloride Hemostatic Agents with Polyvinyl Siloxane (PVS) Impression Materials

Reliable impression accuracy is critical to clinical success. Concerns have historically been raised regarding the potential for sulfur-containing materials to interfere with the polymerization of polyvinyl siloxane (PVS) impression materials. However, peer-reviewed research provides clear evidence addressing these concerns.

A controlled study published in the Journal of Applied Oral Science evaluated aluminum sulfate, ferric sulfate, and aluminum chloride hemostatic agents in combination with multiple PVS materials under clinically relevant conditions.

### ***Key Findings***

- No polymerization inhibition was observed in any tested samples (n=240)
- All PVS materials demonstrated complete set and precise surface detail reproduction
- No adverse effects were identified, even under conditions simulating real-world clinical handling, including contact with retraction cords handled with latex gloves

### ***Evidence-Based Conclusion***

Aluminum sulfate, ferric sulfate, and aluminum chloride hemostatic agents have been shown not to interfere with the polymerization or clinical performance of PVS impression materials when used as directed.

### ***Clinical Confidence***

Based on this evidence, clinicians can confidently use the following products in conjunction with PVS impression systems:

- Retrax Gel AS (Aluminum Sulfate)
- Retrax Gel AS Clear (Aluminum Sulfate)
- Retrax Gel FS (Ferric Sulfate)

- Retrax Solution AS (Aluminum Sulfate)
- Retrax Solution FS (Ferric Sulfate)
- Retrax Solution AC (Aluminum Chloride)

These formulations are designed to deliver effective hemostasis and gingival management without compromising impression accuracy or material performance.

### ***Best Practice Note***

As with all PVS impression procedures, standard clinical protocols should be followed, including minimizing direct contact between unset PVS materials and latex-containing products.

### ***Reference***

Machado CEP, Guedes CG. Effects of sulfur-based hemostatic agents and gingival retraction cords handled with latex gloves on the polymerization of polyvinyl siloxane impression materials. *Journal of Applied Oral Science*. 2011;19(6):628–633.