# VALPLAST® TECH SHEET

## The Esthetic Flexible Partial Denture

Patients with metal clasp partial dentures often express that they feel selfconscious about smiling, conversing and even enjoying a meal. Not anymore with the Valplast Flexible Partial Denture from DAL. Lightweight, practically invisible, and wonderfully comfortable, Valplast has been pleasing dental patients for over seventy years.

With Valplast you can create metal-free, lightweight flexible partial dentures that provide a natural tissue blend effect with translucency that picks up the patient's natural tissue tone. This translucency is combined with a simulation of natural blood vessels that readily adapts to a variety of natural tissue shades. In addition to the natural coloration, each Valplast partial is designed to follow the pattern of natural gum formations with thin clasp designs, making the restoration practically unnoticeable when worn. With Valplast you have a proven partial denture system that can be designed with a lightweight, metal-free base or used in combination with a cast metal partial framework for enhanced stability and natural-looking esthetics. With either option, you can be assured that you are providing your patients with the finest in partial denture treatment.

## VALPLAST MATERIAL PROPERTIES

Valplast is a pressure-injected, flexible denture base resin that is ideal for partial dentures and unilateral restorations. The resin is a biocompatible nylon thermoplastic with unique physical and esthetic properties. The material is a specialized form of nylon in the family of superpolymides (a very pure nylon) that will not deteriorate chemically when it comes into contact with the fluids, bacteria, and physical environment of the mouth. Available in three basic shade categories (medium pink, light pink and meharry), Valplast is uniquely formulated to allow your patient's natural tissue tone to appear through the material for optimal esthetics.

## THE BENEFITS OF VALPLAST

**Natural Esthetics:** Your patients will benefit from the natural tissue blend effect of the thin clasp design and the translucency that picks up the natural tissue tone. Virtually invisible, Valplast gives your patients the confidence they need with each and every smile.

Patient Comfort: Partial dentures constructed with Valplast can be made very thin, reducing the bulk required for strength in acrylic base materials. The thinness yields more sensation and the flexibility of the material absorbs a portion of the shock of movement under mastication. From the initial insertion, through continued wear, the patient will experience minimal obstruction and minimal reaction to the stresses normally produced by rigid base materials.

**Durable:** Valplast provides exceptional compressive, impact and bending strength and will not deteriorate chemically when it comes into contact with the fluids, bacteria and physical environment of the mouth.

Biocompatible: Valplast is monomer-free and hypo-allergenic.

**Stress-Breaking Function:** The flexibility of the Valplast resin achieves the effect of a stress-breaker without attachments. The gingival tissue is gently stimulated under mastication, and unnatural stresses on the remaining teeth are substantially reduced.

#### VALPLAST INDICATIONS

Valplast can be used whenever you are considering a removable partial denture for your patient. There are three basic design options when choosing Valplast:



#### Valplast Bilateral Partial Denture

The metal-free, flexible Valplast partial provides a fully functional yet esthetically superior removable partial denture. Patients who have worn both conventional metal partials and Valplast report that Valplast feels more natural in the mouth because of the thinness and lightweight design of the material. Additionally, patients report that Valplast gives them more confidence when eating, smiling and appearing in public because of the excellent retention and the thin clasp designs.



### Valplast Permanent Flipper

The Valplast permanent flipper provides you and your patients with an esthetic, functional design alternative to conventional cross-arch partial dentures. The flexible base combined with the thin clasp designs provides maximum retention, stability and esthetic appeal.



#### Combination Valplast with Chrome Cobalt Partial Denture

The Valplast partial denture can also be used with cast metal frameworks for natural-appearing esthetics. The combination of the cast metal framework with the Valplast provides enhanced stability because of the metal occlusal rests and the lingual rest seats.

### THE VALPLAST FUNCTIONAL ADVANTAGE

The flexibility of the Valplast resin allows the design to take full advantage of available undercuts, especially recessed areas of supporting alveolar contours. The clasps and finger extensions pass over high points and protuberances easily, relaxing into the natural undercut to provide retention without pressure at the contact point. Under mastication, the gentle movement of the base creates a slight massaging effect over the natural gum. This produces a stimulation that has been shown to retard the deterioration of natural tissue and bone.

**Preparation:** Valplast uses the Retento-Grip tissue-bearing technique for retention. No tooth or tissue preparation is needed. Simply send a master cast poured promptly and carefully from an alginate impression along with opposing model and bite registration.

**Shade Selection:** Valplast is produced to remain translucent after processing, with a simulation of natural blood vessels. The translucency readily adapts to a variety of natural tissue shades. The resin is also available in a meharry tone and a light pink tone when the basic shade of the tissue is dark or light.

**Impression:** The best type of impression material to use is alginate. The powder should be gently stirred from the bottom of the container to the top to redistribute the heavier elements that control shrinkage in the impression. The model should be poured promptly. Most other impression materials compress the tissue too much, leading to increased adjustment time.

**Insertion Technique:** Immediately prior to inserting in the patient's mouth, immerse the Valplast restoration in very hot tap water. Leave the partial in the water for about one minute. Remove the partial from the water and allow it to cool just to the point where it can be tolerated by the patient. Gently insert the partial in the mouth. The hot water treatment permits a very smooth initial insertion and a good adaptation with the natural tissues in the mouth. If the patient senses any discomfort because of tightness of a clasp, the clasp may be loosened slightly by immersing that area of the partial in hot water and bending the clasp outward. If a clasp requires tightening, the clasp area may be immersed in hot water and bent inward to tighten.

**Adjustments:** The abrasive that is most effective with a handpiece is a green silicone-carbide abrasive point usually used for porcelain or precious metals. The green point will permit fine adjustments to be made with a minimal degree of roughness on the surface. Simply use a rapid motion (with a light touch) and continuously vary the contact point. The point can be used for effective reduction of the periphery edge, relief in tissue-contacting areas, and relief in supporting areas to relieve tightness or difficulty in insertion and removal.

**Polishing:** Repolishing is often not necessary when the green point is used properly. If repolishing is necessary, it can be done with coarse pumice and brown tripoli using a soft rag wheel. A high luster can be restored to the surface using Val-Shine polishing compound following the tripoli application. DAL provides a free polishing/adjustment/patient care kit with each Valplast partial.



Add To / Reline Procedures: All tooth, clasp, or saddle additions must be completed in the laboratory using Valplast resin. No other materials should be used when adding to Valplast. Relines are relatively infrequent with Valplast because of its ability to adapt to the subtle changes in the mouth. If a reline is indicated, simply remove all adhesives from the tissue side of the partial and take a rubber base wash impression in a closed mouth position. Then take an alginate pickup impression, pour immediately and send to the laboratory.



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