



99%
rating at
recall

Kulzer

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Description

Venus Diamond is a radiopaque, nano-hybrid composite with a packable consistency. **Venus Diamond** is indicated for all classes of anterior and posterior restorations and may be used with any suitable bonding agent. **Venus Diamond** is available in both syringe and unit dose (PLT) delivery in 23 shades. **iBOND Total Etch** is a light-cured adhesive used in conjunction with phosphoric acid etchant. It contains nanofillers in an ethanol solvent and can be applied in one coat. **iBOND Self Etch** is a light-cured, self-etching, one-component bonding agent. Light curing time for both adhesives is 20 seconds. **iBOND** is available in both 4 mL bottles and single-dose delivery.

Purpose

The purpose of this evaluation was to monitor the clinical performance of **Venus Diamond** restorations bonded with **iBOND Total Etch** and **iBOND Self Etch** at one year.

Clinical Evaluation Protocol

- 120 **Venus Diamond** restorations were placed.
- 108 restorations were recalled during the first year after placement.
- Anterior and posterior restorations were included (Figures 1 and 2).
- Restorations were bonded with **iBOND Total Etch** and **iBOND Self Etch** (Table 1).
- At recall, restorations were evaluated for resistance to fracture/chipping, esthetics, resistance to marginal discoloration, wear resistance, lack of sensitivity and retention.
- Restorations were evaluated on a 1-5 rating scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent.

TABLE 1

Venus Diamond	# Placed	# Recalled
with iBOND Self-Etch	84	76
with iBOND Total-Etch	36	32



Consultants' Comments

"Excellent esthetics."

"Good radiopacity."

"Strong composite for posterior restorations."

FIGURE 1

Venus Diamond/iBOND Self-Etch Restorations Recalled

- Class I
- Class II
- Class III
- Class IV
- Class V

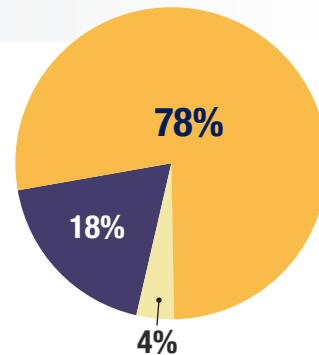


FIGURE 2

Venus Diamond/iBOND Total-Etch Restorations Recalled

- Class I
- Class II
- Class III
- Class IV
- Class V

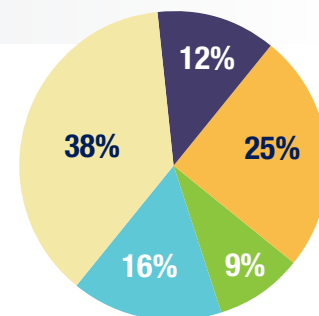
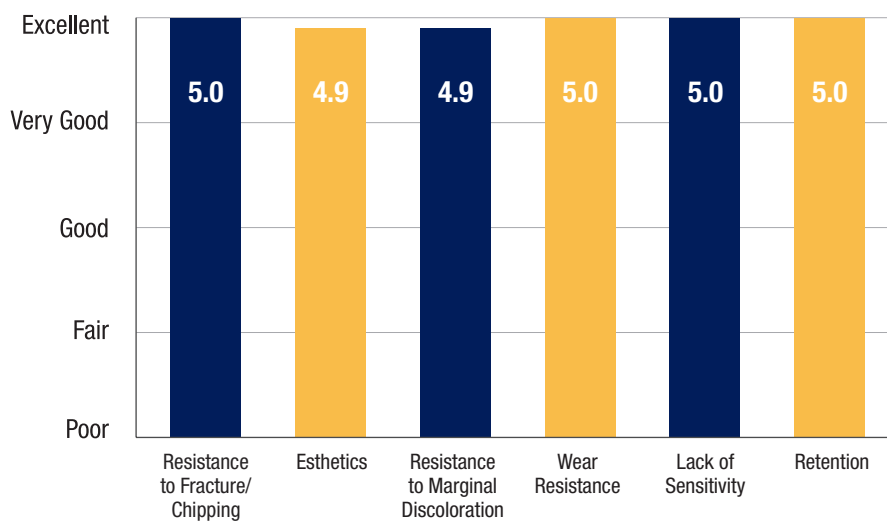


FIGURE 3: Results of *Venus Diamond / iBOND* at One-year Recall

Clinical Observations

Resistance to Fracture/Chipping

Venus Diamond proved to be a durable restorative material during this first year after placement. No instances of fracture or chipping were observed in any of the restorations recalled (Figure 3).

Esthetics

Venus Diamond was used mainly in posterior applications, and 96% of the recalled restorations received ratings of “excellent” for esthetics. Five restorations (4%) had a slight fault in color match to the tooth (Figure 3).

Resistance to Marginal Discoloration

Venus Diamond exhibited excellent resistance to staining at the margins of the restorations (Figure 3). No staining was seen in any of the restorations bonded with *iBOND Total-Etch*. Three (4%) of the restorations bonded with *iBOND Self-Etch* showed minor marginal staining.

Wear Resistance

No visible signs of wear were noted on the *Venus Diamond* restorations recalled (Figure 3).

Lack of Sensitivity

Patients were questioned about sensitivity at their recall appointments; no sensitivity was reported (Figure 3).

Retention

All patients recalled had intact restorations during the first year after placement (Figure 3). No de-bonds occurred.

Summary

Venus Diamond restorations bonded with *iBOND Total Etch* and *iBOND Self Etch* were evaluated at one year. Excellent ratings were observed for resistance to fracture/chipping, esthetics, resistance to marginal discoloration, wear resistance, lack of sensitivity and retention. *Venus Diamond/iBOND* received a 99% clinical performance rating.