

Valux™ Plus material, manufactured by 3M ESPE, is a visible-light activated, radiopaque, restorative composite. It is designed for use in both anterior and posterior restorations. The filler in Valux Plus is zirconia-silica. The inorganic filler loading is 71% by volume with a particle size range of 3.5 to 0.01 micron. Valux Plus contains BIS-GMA and TEGDMA resins. A 3M ESPE adhesive is used to permanently bond the restoration to the tooth structure. The restorative is available in a variety of shades.

Precuations For Patients and Dental Personnel:

1. ETCHANT PRECAUTIONS: Protective eyewear for patients and dental staff is recommended when using etchants. Avoid contact with oral soft tissue, eyes and skin. If accidental contact occurs, flush immediately with large amounts of water. For eye contact, also consult a physician.

2. COMPOSITE PASTE PRECAUTIONS: Composite paste contains BIS-GMA and TEGDMA. A small percentage of the population is known to have an allergic response to acrylate resins. To reduce the risk of allergic response, minimize exposure to these materials. In particular, exposure to uncured resins should be avoided.

Use of protective gloves and no-touch techniques is recommended. If skin contact occurs, wash skin immediately with soap and water. Acrylates may penetrate commonly used gloves. If restorative material contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. If accidental contact with eyes or prolonged contact with oral soft tissue occurs, flush immediately with large amounts of water. If irritation persists, consult a physician.

INSTRUCTIONS: The following instructions are separated into three sections: preliminary, anterior placements and posterior placements.

I. PRELIMINARY:

A. PROPHY: Teeth should be cleaned with pumice and water to remove surface stains.

B. SHADE SELECTION: Before isolating the tooth, select appropriate shade of material. Some hints for choosing the correct shade are listed below.

SHADE: Teeth are not monochromatic. Each of the three areas of the tooth has a characteristic color. (See sketch).

GINGIVAL AREA: If the restoration is in the gingival area of the tooth, make note of the amount of yellow color it contains.

BODY AREA: Observe the body of the tooth and note the characteristic color it contains - is it gray, yellow, or universal.

INCISAL AREA: Study the incisal edges of the tooth and the neighboring teeth. Do the incisal edges have a blue or gray color to them? Note how far the translucency extends. This should be duplicated in the repaired tooth.

THINNER RESTORATIONS: The amount of color that a restoration will have is partly due to the thickness of the restoration. Thus, if a shade match is taken from a thick shade guide tooth for a thin restoration, an incorrect shade may be chosen. For a thin restoration, the wedge end of the shade guide should be used.

MOSQUITO: Place the material, in the chosen shade on the unetched tooth. Manipulate the material to approximate the thickness and site of the restoration. Cure. Have several people evaluate the mockup under different lights. Flick the restorative off the unetched tooth with an explorer. If the shade did not match, choose another and repeat the mockup. If the shade was acceptable, continue the tooth preparation with isolation.

C. ISOLATION: A rubber dam is the preferred method of isolation. Cotton rolls plus an evacuator can also be used.

II. ANTERIOR RESTORATIONS

A. CAVITY PREPARATION: Use conventional cavity preparations for all Class III, IV and Class V restorations.

B. PULP PROTECTION: Use Vitrebond™ light cure glass ionomer liner/base, manufactured by 3M ESPE, to base areas of deep cavity excavation. If a pulp exposure has occurred, use a minimum amount of calcium hydroxide followed by an application of Vitrebond liner/base. In deep restorations without pulp exposure, only Vitrebond liner/base is needed. See Vitrebond instructions for details.

C. PLACEMENT OF MATRIX: Mylar strips and crown forms may be used to minimize the amount of excess material used.

NOTE: The matrix may be placed following the enamel etching and adhesive application steps if preferred.

D. ETCHING: Etch according to the instructions of the 3M ESPE adhesive product that is used.

E. PRIMING: Prime according to the instructions of the 3M ESPE adhesive product that is used.

F. ADHESIVE APPLICATIONS: Apply the adhesive according to the directions of the 3M ESPE adhesive product that is used.

G. ADHESIVE CURING: Cure the adhesive coating the appropriate time according to the Adper™ Scotchbond™ adhesive product used, manufactured by 3M ESPE. Expose its entire area to visible light from a 3M ESPE light or other dental visible light curing unit of comparable intensity.

H. DISPENSING THE COMPOSITE: Follow the directions corresponding to the dispensing system chosen.

1. SYRINGE

a. Dispense the necessary amount of restorative material from the syringe onto the mix pad by turning the handle slowly in a clockwise manner. To prevent coozing of the restorative when dispensing is completed, turn the handle counter-clockwise a half turn to stop paste flow. Immediately replace syringe cap. If not used immediately, the dispensed material should be protected from light.

b. Place restorative into the cavity using a nonmetallic placement instrument. Overfill the cavity to permit extension of composite beyond cavity margins. Contour and shape with appropriate composite instruments.

I. CURING: Cure with a 3M ESPE light curing unit or other dental visible light curing unit of comparable intensity. Hold the light exit tip as close to the restorative material as possible. A cure time for each shade is listed below.

SHADE	THICKNESS (mm)	TIME (sec)	SHADE	THICKNESS (mm)	TIME (sec)
A1.0	2.5	40	B2.0	2.5	40
A2.0	2.5	40	B3.0	2.5	40
A3.0	2.5	40	C2.0	2.5	40
A3.5	2.5	40	UD	2.0	40

J. **FINISHING:** Contour restoration surfaces with fine finishing diamonds, burs, or stones. Contour proximal surfaces with Sof-Lex™ Finishing Strips, manufactured for 3M ESPE.

K. **ADJUST OCCLUSION:** Check occlusion with a thin articulating paper. Centric and lateral excursion contacts should be examined. Carefully adjust occlusion by removing material with a fine polishing diamond or stone.

L. **POLISHING:** Polish with Sof-Lex™ discs, manufactured by 3M ESPE, and strips and with white stones or rubber points where discs are not suitable.

III. POSTERIOR RESTORATIONS

A. CAVITY PREPARATION: Cavity design requirements are essentially a conventional preparation with refinement of the cavosurface margin for enhancement of acid etching. No residual amalgam or other base material should be left in the internal forms of the preparation which would interfere with light transmission and the hardening of the restorative.

B. PULP PROTECTION: Use Vitrebond liner/base to base areas of deep cavity excavation. If a pulp exposure has occurred, use a minimum amount of calcium hydroxide followed by an application of Vitrebond liner/base. In deep restorations without pulp exposure, only the Vitrebond liner/base is needed. See Vitrebond instructions for details.

C. PLACEMENT OF MATRIX: Place a thin deadsoft metal band and insert wedges firmly. Burnish the matrix band to establish proximal contour and contact area. Adapt the band to the gingival area and avoid overhang.

D. ETCHING: Etch according to the instructions of the 3M ESPE adhesive product that is used.

E. PRIMING: Prime according to the instructions of the 3M ESPE adhesive product that is used.

F. ADHESIVE APPLICATION: Apply the adhesive according to the instructions of the 3M ESPE adhesive product that is used.

G. ADHESIVE CURING: Cure according to the instructions of the 3M ESPE adhesive that is used.

H. DISPENSING THE COMPOSITE: Follow the directions corresponding to the dispensing system chosen.

I. SYRINGE

a. Dispense the necessary amount of restorative material from the syringe onto the mix pad by turning the handle slowly in a clockwise manner. To prevent coozing of the restorative when dispensing is completed, turn the handle counter-clockwise a half turn to stop paste flow. Immediately replace syringe cap. If not used immediately, the dispensed material should be protected from light.

b. Place restorative into the cavity using a nonmetallic placement instrument. Overfill the cavity to permit extension of composite beyond cavity margins. Contour and shape with appropriate composite instruments.

J. CURING: Cure with a 3M ESPE light curing unit or other dental visible light curing unit of comparable intensity. Hold the light exit tip as close to the restorative material as possible. A cure time for each shade is listed below.

SHADE	THICKNESS (mm)	TIME (sec)	SHADE	THICKNESS (mm)	TIME (sec)
A1.0	2.5	40	B2.0	2.5	40
A2.0	2.5	40	B3.0	2.5	40
A3.0	2.5	40	C2.0	2.5	40
A3.5	2.5	40	UD	2.0	40

J. **FINISHING:** Contour restoration surfaces with fine finishing diamonds, burs, or stones. Contour proximal surfaces with Sof-Lex™ Finishing Strips, manufactured for 3M ESPE.

K. **ADJUST OCCLUSION:** Check occlusion with a thin articulating paper. Centric and lateral excursion contacts should be examined. Carefully adjust occlusion by removing material with a fine polishing diamond or stone.

L. **POLISHING:** Polish with Sof-Lex™ discs, manufactured by 3M ESPE, and strips and with white stones or rubber points where discs are not suitable.

the material to the internal surfaces of the box preparation and to the matrix and cure. Complete the box preparation with incremental placements not exceeding 2.5mm in thickness. Cure each increment separately.

c. Fill the remainder of the cavity preparation in layers no greater than 2.5mm. For large cavity preparation, it is recommended that the final occlusal placement be done in vertical increments buccal to lingual. Contour to provide proper contact area and occlusal anatomy.

I. FINISHING: Contour restoration surfaces with fine finishing diamonds, burs or stones. Contour proximal surfaces with 3M ESPE Finishing strips.

J. ADJUST OCCLUSION: Check occlusion with thin articulating paper. Centric and lateral excursion contacts should be examined. Carefully adjust occlusion by removing material with a fine polishing diamond or stone.

K. POLISHING: Polish with Sof-Lex™ discs and strips and with white stones or rubber points where discs are not suitable.

L. ADDITIONAL NOTES:

1. Sensitivity - some patients may experience transitory postoperative sensitivity. The risk of sensitivity can be minimized by the following measures:

- Remove minimal tooth structure.
- Use proper isolation. Use of a rubber dam is highly recommended.
- Adequate pulp protection. Use a glass ionomer cavity liner/base on appropriate dental surfaces.
- Place restorative material in increments, curing each increment separately.
- Adequately cure restorative according to instructions for shade and thickness of restorative and light exposure time.

f. Adjust occlusion carefully. Check for hyperocclusion, particularly in lateral excursion contacts.

STORAGE AND USE:

1. Do not expose restorative materials to elevated temperatures or intense light.

2. Refrigeration (4°C or 40°F) is recommended. Allow to come to room temperature for use.

3. Do not store materials in proximity to eugenol-containing products.

4. The composite pastes are designed for use at room temperature of approximately 21°-24°C or 70°-75°F. Shelf life at room temperature is 36 months. See outer package for expiry date.

No person is authorized to provide any information which deviates from the information provided in this instruction sheet.

III. ПОЛІМЕРИЗАЦІЯ: Світобудіння проводиться устроєм 3M ESPE або іншим устроєм, яким відповідає вимогам інструкції.

IV. ДОЗИРАННЯ НА КОМПОЗИТ: Шлифування проводиться при допомозі дріжджатка з шпинделем на південний схід від контактів.

V. ХРАНЕНИЕ И ИСПОЛЬЗОВАНИЕ:

1. Не подвергайте пломбировочным материалам воздействию повышенных температур и интенсивного света.

2. Рекомендуется хранение в холодильнике (4°C или 40°F). Перед употреблением доведите материал до комнатной температуры.

3. Не храните материал близко веществ, содержащих углен.

4. Композитные пасты используются при комнатной температуре приблизительно 21°-24°C или 70°-75°F. Срок хранения при комнатной температуре - 36 месяцев. Дата истечения срока годности материала расположена на наружной стороне упаковки.

5. Актиуриране на олупните: Олупните се извършва с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

6. Актиуриране на олупните: Олупните се извършва с тънка артикулационна хартия. Внимателно се коригира олупната чрез изпълване на материала с фин диамантен пилет.

7. Загладване: Повърхностите на обтурацията се загладват с фини диамантени пилети. Апроксимативните повърхности се оформят с полимеризиращ ленти Sof-Lex™, произведени от 3M ESPE.

8. Актиуриране на олупните: Олупните се извършват с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

9. Актиуриране на олупните: Олупните се извършват с тънка артикулационна хартия. Внимателно се коригира олупната чрез изпълване на материала с фин диамантен пилет.

10. Дозиране на композит: Олупните са извършвани с дискове и ленти Sof-Lex™, произведени за 3M ESPE.

11. Хранение и использование: Съгласно указанията за използваната система за дозиране.

12. Шлифуване: Шлифуването се извършва с фин диамантен пилет.

13. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

14. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Внимателно се коригира олупната чрез изпълване на материала с фин диамантен пилет.

15. Дозиране на композит: Олупните са извършвани с дискове и ленти Sof-Lex™, произведени за 3M ESPE.

16. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

17. Загладване: Повърхностите на обтурацията се загладват с фини диамантени пилети.

18. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

19. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

20. Дозиране на композит: Олупните са извършвани с дискове и ленти Sof-Lex™, произведени за 3M ESPE.

21. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

22. Загладване: Повърхностите на обтурацията се загладват с фини диамантени пилети.

23. Актиуриране на олупните: Олупните са извършвани с тънка артикулационна хартия. Тръбка да е отгреди контактите при централна олупнка и странични движения.

