

## **Chapter 28: Monomer Liquid and Polymer Powder Nail Enhancements**

*Cosmetologists should study and have a thorough understanding of monomer liquid and polymer powder nail enhancements because they are popular services that will be frequently requested, they are lucrative services (clients who request them are committed to their nail upkeep and will become loyal clientele) and knowing how to properly work with the enhancement material will allow you to perform services safely for you and your client.*

### **Monomer Liquid and Polymer Powder Nail Enhancements** (p. 898-900)

- **Monomer liquid and polymer powder nail enhancements (also known as sculptured nails)**- created by a liquid chemical mixed with a powder in white, clear, pink and many other colors to form the nail enhancement
- **Monomer**- “mono” means “one” and “mer” means “unit” so monomer is one unit called a molecule
- **Polymer**- “poly” means “many” so a polymer is a substance formed by combining many small molecules into very long chain-like structures
- **Monomer liquid and polymer powder products can be applied in one of three ways:**
  - On the natural nail as a protective overlay
  - Over a nail tip
  - On a form to create a nail extension
    - ❖ A natural hair and pointed, round, or oval application brush is the best brush for applying these products.
    - ❖ The brush is immersed in the monomer liquid. The tip of the brush is then touched to the polymer powder and a small bead of product forms.

### **PROCEDURE FOR ONE-COLOR MONOMER LIQUID AND POLYMER POWDER NAIL ENHANCEMENTS OVER NAIL TIPS OR NATURAL NAILS** (p. 908-911)

1. Gently push back the eponychium. Use cuticle remover if necessary. Follow manufacturer’s directions. Have client wash and dry hands again to remove any remaining oils.
2. Gently buff the nail plate with a medium-grit adhesive to remove the shine caused by natural oils on the nail plate. Remove nail dust with a clean, dry nail brush and DONOT touch the surface of the nails again with your fingers.
3. Apply nail dehydrator to the nails starting with the pinky finger on the left hand.
4. Apply tips if client wants them.

5. Apply nail primer following manufacturer's directions. Allow primer to dry thoroughly. Apply primer to natural nail but avoid putting on tips unless instructed by the manufacturer.
6. Pour monomer liquid and polymer powder into separate dappen dishes.
7. Dip brush into monomer liquid and wipe on the edge of the container to remove the excess.
8. Dip the tip of the same brush into the polymer powder and rotate slightly. Pick up a bead of product- with medium to dry consistency- that is large enough for shaping the entire free edge extension. If you have trouble using a large bead, you may find it easier to use two smaller beads.
9. Place the pink product bead in the center of the free edge of the tip or natural nail. Immediately wipe your brush on the table towel gently to remove any product left in the bristles and bring the brush back to a perfect point.
10. Use the middle portion of your sable brush to press and smooth the product to shape the nail enhancements free edge. **DO NOT PAINT THE PRODUCT ONTO THE NAIL.** Pressing and smoothing creates a more natural looking nail.
11. Place the second bead on the nail plate below the first bead and next to the free edge line in the center of the nail. Immediately wipe your brush gently on the table towel to remove any product left in the bristles and bring the brush back to a perfect point.
12. 12. Press and smooth the product to the sidewalls, making sure the product is very thin around the edges. Leave a tiny free margin between the product placement and the skin. Be sure to use a medium consistency that is not too wet.
13. Pick up smaller beads of the pink polymer powder with your brush and place them at the base of the nail plate, leaving a tiny free margin between the product and the skin. Immediately wipe your brush gently on the table towel to remove any product left in the bristles and bring the brush back to a perfect point.
14. Use the brush to press and smooth the beads over the entire nail plate, Glide the brush over the nail to smooth out imperfections.
15. Apply more product near eponychium, sidewall, and free edge if needed to complete the application. Be sure the product remains thin in these areas so the nail looks natural.
16. Use medium grit abrasive to shape the free edge and remove imperfections. The refine with medium-fine grit.
17. Buff the nail enhancement with a fine grit buffer until the entire surface is smooth. If nail polish is to be worn, use a high shine buffer.
18. Apply and rub nail oil into the surrounding skin and nail enhancement, massage briefly to speed penetration.
19. Apply hand cream and massage hand and arm.
20. Ask client to wash hands thoroughly and dry on clean disposable towel.
21. Polish nail enhancements or apply a gel sealant.

### **Monomer Liquid and Polymer Powder Nail Enhancement Supplies** (p. 901-904)

- **Monomer Liquid-** will be combined with polymer powder to form the sculptured nail; the amount used to create a bead is called the mix ratio and can be described as wet, medium, or dry
  - Wet bead- twice as much liquid as powder
  - Dry bead- equal amounts of liquid and powder
  - Medium bead- halfway between the two
- **Polymer Powder-** available in white, clear, pink, natural, and many other colors
- **Nail Dehydrator-** remove surface moisture and tiny amounts of oil left on the natural nail plate; avoid contact with the skin; great way to help prevent lifting of the nail enhancement prior to applying primer
- **Nail Primer-** used to help adhere nail enhancements to the natural nail; available in acid-based, acid-free, and non-acid formulas
- **Abrasives-** used for shaping, smoothing, and buffing; medium grit (180 to 240) for natural nail preparation and initial shaping; fine grit (350 or higher) for final buffing; three-way buffer used to create high shine
- **Nail Forms-** placed under the free edge and used to extend the nail enhancements beyond the fingertip for additional length; made of paper or Mylar with adhesive back (disposable) or pre-shaped plastic or aluminum (which may be cleaned and disinfected)
- **Nail Tips-** preformed nail extensions made from ABS or tenite acetate plastic; available in a wide variety of shapes and colors
- **Dappen Dish-** special holders with narrow openings to minimize evaporation of the product; must be covered with a tight-fitting lid when not in use; NEVER pour unused monomer back into its original container as it has been contaminated by small bits of polymer
- **Nailbrush-** best brush has sable bristles and a round or oval application brush; synthetic or less expensive brushes do not pick up enough monomer liquid or release it properly
- **Safety Eyewear-** protects the eyes from accidental splashes from product or flying debris
- **Dust masks-** worn over the nose and mouth to prevent inhalation of dust; provide no protection from vapors
- **Protective gloves-** both disposable and multiuse are available; many salons choose nitrile polymer powder

### **Storing and Disposing of Monomer Liquid and Polymer Powder Products** (p. 904)

***Store all liquids and primers separate from each other in a cool, dark area. DO NOT STORE NEAR HEAT. After Service, discard used materials. Never save used monomer liquid. Pour leftover small amounts into absorbent paper towel and place in sealed plastic bag. Place in closed waste container. Remove items soiled with enhancement materials after each client.***

## **ONE-COLOR MONOMER LIQUID AND POLYMER POWDER MAINTENANCE, REPAIR, AND REMOVAL**

- Maintenance should be performed every two to three weeks depending on how quickly a client's nails grow
- Proper maintenance is both safe and gentle to the nail unit
- In maintenance, the nail is thinned down, the apex of the nail is removed, and the entire nail enhancement is reduced in thickness
- Cracked nails need to be repaired to avoid the risk of infection
- Removal involves soaking the enhancements off in acetone or the manufacturer's suggested removal solution, removing the enhancement, and completing the service

## **ONE-COLOR MONOMER LIQUID AND POLYMER POWDER MAINTENANCE** (p. 916-918)

1. Remove existing polish or gel sealant
2. Using medium-coarse abrasive, carefully smooth down the ledge of the existing product until it is flush with the new growth of the nail plate.
3. Hold medium grit abrasive flat and glide it over the entire nail enhancement to reshape, refine, and thin out the free edge until the white tip appears translucent.
4. Use fine-grit buffer to buff the product and smooth it into the new growth area without damaging the natural nail plate.
5. Use medium-grit abrasive to smooth out any areas of product that may be lifting or forming pockets.
6. Clean the nail enhancements.
7. Remove the oily shine from the natural nail surface.
8. Apply nail dehydrator.
9. Apply nail primer, following manufacturer's directions.
10. Prepare monomer liquid and polymer powder.
11. Pick up one or small beads of enhancement product and place at the regrowth area.
12. Use the brush to smooth these beads over the new growth area. Product near the eponychium, sidewalls, and free edge must be very thin to look natural.
13. Pick up one or small beds and place at the apex of the nail.
14. Use the brush to smooth these beads over the entire nail enhancement.
15. Allow nails to harden. Once hardened, reshape.
16. Buff the nail enhancement.
17. Apply hand cream and massage the hand and arm.
18. Clean the nail enhancements.
19. Apply polish or gel sealant.

## CRACK REPAIR FOR MONOMER LIQUID AND POLYMER POWDER NAIL ENHANCEMENTS (p. 919-920)

1. Remove existing polish or nail sealant.
2. File a V-shape into the crack or file flush to remove the crack. File more than just the crack for added protection.
3. Apply nail dehydrator to the exposed natural nail.
4. Apply nail primer to any exposed natural nail in the crack.
5. If the crack needs support, apply a nail form.
6. Prepare monomer liquid and polymer powder.
7. Pick up one or more small beads and apply to the crack.
8. Press and smooth the enhancement product to fill the crack. *DO NOT LET THE PRODUCT SEEP UNDER THE FORM.*
9. Apply additional beads if needed. Shape the enhancement and allow it to dry.
10. Remove the form if needed.
11. Reshape the enhancement using medium-grit abrasive.
12. Use fine-grit abrasive to buff and smooth the nail. Use a high shine buffer if desired.
13. Apply nail oil.
14. Apply hand cream and massage the arm and hand.
15. Clean the nail enhancements.
16. Apply polish or gel sealant.

## AREAS OF CONCERN FOR BUILDING PROPERLY STRUCTURED NAIL ENHANCEMENTS (p. 905-906)

Nail enhancements should not only look good but should also remain strong and healthy while your client is wearing them. Several areas need particular attention in order for this to be achieved:

- **Apex (the arch)**- the area of the nail that has all the strength; usually oval shaped and located in the center of the nail; the high point is visible no matter where you view the nail
- **Stress area**- where the natural nail grows beyond the finger and becomes the free edge; needs strength to support the extension
- **Sidewall**- the area on the side of the nail plate that grows free of the attachment to the nail fold and where the extension leaves the natural nail
- **Nail Extension Underside**-actual underside of the nail extension; can jut straight out or dip depending on the nail style; should be even and matched on each nail

A nail enhancement should be thin, especially at sidewalls and tips; it should graduate seamlessly from the cuticle to the end of the extension and from sidewall to sidewall; make sure the index, middle, and ring fingers are the same length; the thumb/pinky should be in proportion