Chapter 28

Monomer Liquid and Polymer Powder Nail Enhancements

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“Challenges are what make life interesting; overcoming them is what makes life meaningful.”

– Joshua J. Marine

Objectives

- Explain monomer liquid and polymer powder nail enhancement chemistry and how it works.
- Describe the apex, stress area, and sidewall and where they are located on the nail enhancement.
- Demonstrate proper procedures for applying one color monomer liquid and polymer powder nail enhancements over tips and on natural nails.

Objectives *(continued)*

- Demonstrate the proper procedures for applying two-color monomer liquid and polymer powder nail enhancements using forms over tips and natural nails.
- Describe how to perform a one-color maintenance service using monomer liquid and polymer powder.
- Demonstrate how to perform crack repair procedures.
- Demonstrate how to properly remove monomer liquid and polymer powder.

Acrylic vs. Monomer/Polymer

- Nail enhancements based on mixing liquids (***monomers***) and powders (***polymers***) have been known for years as “acrylic” nails. The term *acrylic* actually refers to an entire family of thousands of different substances such as contact lenses, cements, and Plexiglas®, etc.

Monomer Liquid and Polymer Powder (ML/PP)

- To be as accurate as possible, the text uses *monomer liquid* and *polymer powder* when referencing what for years has been called *acrylic*.
- During this presentation it will be referred to as ML/PP.

ML/PP Composition

- Monomer
  - *Mono* means “one” and “*mer*” means "unit."
  - A monomer is one unit called a molecule.
- Polymer
  - *Poly* means “many.”
  - *Polymer* means "many units or molecules.”

Basic Applications

- Over the natural nail
- Over a nail tip
- Over a flexible form

Monomer Liquid

- Ethyl methacrylate (EMA)
- Methyl methacrylate (MMA)
- Odorless

ML/PP Process

- Immerse brush in monomer.
- Bristles absorb monomer.
- Touch brush tip into polymer.
- Small bead is formed.
- Place bead on nail surface.
- Mold bead with brush.

Monomer Liquid Bead Mix Ratio

- 1 part ML + 1 part PP = Dry bead
- 1.5 parts ML + 1 part PP = Medium bead
- 2 parts ML + 1 part PP = Wet bead

Polymerization

- Additives
- Pigments
- Beads
- Catalysts
- ***Initiators***
- Benzoyl peroxide
- Combining products

Products and Supplies

- Monomer liquid
- Polymer powder
- Nail dehydrator
- Nail primer
- Abrasives
- Nail forms

Products and Supplies *(continued)*

- Nail tips
- Dappen dish
- Nail brush
- Safety eyewear
- Dust masks
- Protective gloves

Products and Supplies *(continued)*

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Storing Products

- Store in covered containers.
- Store in cool, dark area away from heat.
- Discard used materials.
- Avoid skin contact.
- Dispose of according to local rules.

Maintenance

- Maintenance helps prevent lifting or cracking. Breaks and cracks are repaired by filing the area and adding ML/PP to it. Proper maintenance must be performed every two to three weeks. The nail is thinned down, the apex of the nail is removed, and the entire nail enhancement is reduced in thickness.

Maintenance *(continued)*

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Special Nail Enhancement Terms

- Apex or arch
- Stress area
- Sidewall
- Nail extension underside
- Thickness
- C Curve
- Length

Odorless Product Chemistry

- Different chemistry than other ML/PPs
- Have a slight odor
- Used with a dry mix ratio

Odorless Product Differences

- Forms a firm, glossy bead
- Brush wiped frequently
- Brush never reset with monomer liquid
- Hardens more slowly
- Creates a tacky layer
- Inhibition layer removed with alcohol, acetone, or filing

ML/PP Colors

- Basic pink
- White
- Clear
- Natural
- Customized

Practical Procedures

- Pre- and Post-Service Procedures
- One-Color ML/PP Over Tips
- Two-Color ML/PP Using Forms
- One-Color ML/PP Maintenance
- Crack Repair for MLPP
- ML/PP Enhancement Removal

Summary and Review

- What is the chemistry behind ML/PP and how does it work?
- Define *apex, stress area,* and *sidewall* and explain where they are located.

Summary and Review *(continued)*

- What is the proper procedure for applying one-color ML/PP enhancements over tips or natural nails?
- What is the proper procedure for applying two-color ML/PP enhancements using forms?

Summary and Review *(continued)*

- What is the proper procedure for performing a one-color maintenance service on nail enhancements using ML/PP?
- How is a crack repair performed?
- How are ML/PP enhancements removed?

Congratulations!

You have completed one unit of study toward course completion.

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