BASIC
HAIR COLOR
THEORY
BASIC COLOR THEORY

When Coloring the hair, remember the rules of complementarities

Red is opposite Green
Blue is opposite Orange
Yellow is opposite Violet

When each of the two complementary colors is combined, they equal a neutral brown.

LIFTING AND DEPOSITING

Most hair colors are defined by the lift/deposit ratio. This is commonly known as the level system. Level One means black and Level Ten means the absence of all pigments as the lightest blonde. Gray hair is also the absence of Melanin. There could be as much as two levels of color difference between two different manufacturer's hair colors of the same color. We suggest the only way to know these colors is to experiment on swatches. The next time you give someone a big haircut, save some hair and use it to learn what EcoColors Haircolor can do.

When you lift hair with permanent Haircolor, you also deposit. The more you lift with a color, the less you deposit. The more you deposit a Haircolor, the less you lift. For example, a black Haircolor (Level One) would have the greatest amount of deposit and the least amount of lift. Silver Blonde (Level Ten) would have the least amount of deposit and the most amount of lift.

TONAL VALUES

Besides lifting and depositing there are other influences to obtain a particular color. This is the Tonal Value of the color. EcoColors Haircolor contains the following different tones:

1 Gold
2 Ash (Violet or Purple)
3 Natural
4 Red
5 Orange
When deciding what Tone to use there are a few rules to remember:

1) If the hair has 25% or more gray, it is recommended to use a Natural shade as well as another desired tone to color the gray hair. We will discuss gray coverage in detail later.

2) If the hair is porous you must decide on the desired shade. Sun, previous chemicals, blow drying, alkaline shampoos, inactive or low active thyroid gland and diet low in protein all contribute to porous hair. The results with porous hair are extremely varied. If you put a warm auburn on faded, over processed blonde coarse hair you might end up with pink or shrimp colored hair. On the other hand, if you put this same formula on healthy blonde hair that is not porous you might get a beautiful bright auburn color. In general, the greater the porosity, the more cool tones will be absorbed. When in doubt with porous hair, do a test strand. This only takes 15 minutes with a ten-volume developer (deposit only) and will save you time and money in the long run. DEPOSIT ONLY (10 volume) is the most recommended approach for porous hair.

**DEVELOPERS**

EcoColors has four different developers:

- **DEPOSIT ONLY** (10 volume)
  - No lift or semi-permanent

- **REGULAR** (20 Volume)
  - One to two levels of lift

- **FAST** (30 Volume)
  - Two to three levels of lift

- **EXTRA FAST** (40 Volume)
  - Three or four levels of lift

**A WORD ABOUT BLEACH**

There has been much research done about using 40 volume with bleach.

This is not recommended. Here is why...
The stronger the formula, the faster the melanin in the hair shaft dissolves. This may result in damage and weakening of the hair shaft. If you use a 20 volume developer or a 30 cream developer with bleach, the slower processing time allows the bubbles made to escape the cuticle layer of the hair shaft, allowing the melanin in the cortex to be dissolved/dispersed with little or no damage to the integrity of the hair shaft. Try experimenting with hair swatches of 20, 30 and 40 volume (and your bleach) applied to different swatches at the same time, with the same amount of heat and you will be surprised to see that 20 volume developer effectively lightens the hair with heat as the 40 volume, but with less damage.
PERMS ON HAIR COLOR

We only recommend doing these two chemical processes together if EcoColors Haircolor is used with a Regular developer (20 vol). Any process that requires stronger than 20 volume is not recommended if the client wants to have healthy shiny hair. We rarely perm and color the same head of hair. If we do, we recommend Deposit Only color (10 vol). If hair has been relaxed and in great condition, we only recommend coloring the hair with 20 volume on the previously relaxed hair at least one inch from the scalp to ensure there is no overlapping of relaxer and color when the new growth is redone with relaxer. This will protect against breakage. Relaxing the hair is an art (as hair color is) and is only as effective as the ability of the person applying the chemical. We recommend using a mild relaxer if you are also planning on coloring the hair.

These services should be done a week apart. Please use your good judgment in deciding whether it would be beneficial for your client to have two chemical services done and advising your client of the possible damage that would occur.

Even though EcoColors Hair Color is non-toxic, it is still a chemical process on the hair.

GRAY HAIR

Gray hair occurs because the production of the melanin pigment within the hair's cortex is no longer produced. There are different approaches to coloring gray hair, depending on where the gray is located on the head as well as the percentage of gray present.

Remember it is possible to disguise the grays by lowlighting, highlighting, painting or all over color. When deciding what formulation to use, it is important to do the following:

1) Identify the natural color of the client's hair. Always use a natural base when re-pigmenting the gray hair. Another base (depending on desired shade) can be used along with the natural base. For example, you may use medium brown with light drabber to counteract the warm tones. You must experiment with proportions of drabber to the natural tones to determine how much drabber to use. It is safe to begin with three parts natural tone to one part drabber and go from there. If the hair is still too warm, the next time you color the hair try increasing your drabber one more part, making it equal parts drabber to natural tone. The light drabber is a violet base and will not give as much red coverage as the dark drabber. We usually use dark drabber with dark brown or black.

2) As a general rule, always formulate one shade darker than the natural color when there is predominately gray hair present.

3) Identify the amount of gray in proportion to their age.

4) Is the client comfortable with gray? If they are not, what kinds of commitment are they willing to make to maintain the color you would apply? This includes cost and frequency of color application.

5) Discuss what natural undertones would show up when covering the grays and which approach in coloring would best suit the client. When using EcoColors Haircolor on gray hair, we recommend bottle application for gray coverage. After mixing the appropriate color formulation, apply the color heavily saturating the gray hair shafts with color. Apply cotton around the forehead; cap and heat for 5 minutes to further open the grays. Then process the hair with cap remaining on for 30 minutes and no heat. For resistant grays allow the color to process for 40 minutes.
HAIR COLOR SHADES

Black pro     level 1 natural
Black         level 2 natural
Dark brown    level 5 natural
Medium brown  level 6 natural
Light brown   level 8 natural
Reddish brown level 8 orange to orange red
Warm auburn   level 6 red violet to red orange
Light auburn  level 7 purple to level 8 red orange
Light ash blonde level 9 ash
Medium ash blonde level 8 ash
Ash blonde    level 7 ash
Dark blonde   level 8 violet
Reddish blonde level 9 red
Golden blonde warm level 8 gold
Golden blonde neutral level 8 beige
Light gold. blonde level 9 gold
Bright red     level 6 orange to red violet
Light drabber muddy violet
Mahogany      level 6 pink
Dark drabber  muddy purple
Pearl platinum HL level 10 violet
Blonde platinum HL level 10 gold
Champagne beige HL level 10 warm
Silver blonde HL level 10 cool

MIXING THE COLOR AND APPLICATION

Make sure you gently shake the bottles to blend all the natural oils before mixing.
To prepare the hair color, mix equal parts color to developer (= full strength).

When covering gray hair, be sure to apply the color mixture full strength to the new growth.

Apply a plastic cap and heat under a dryer or heat lamp for 5 minutes. Then remove the client from the heat source. Leave on the plastic cap and allow processing time for 30 to 45 more minutes depending on the resistance of the gray hairs.

If you would like to re-pigment the previous colored ends, dilute your remaining color mixture by half water (filtered water is best) and apply the color to the previously colored hair. Allow to process 5 minutes.

Never apply full strength (20 volume) color to previously colored ends.
Always apply 10 volume or less to previously colored ends.

Watch the hair with Fast and Extra Fast to desired shade.
FORMULATION TIPS

• **For gray coverage with no red tones:**
  Equal Parts Medium brown and Light drabber with equal parts regular developer (20 volume) for a level 6 Brown Color.
  
  Equal Parts Dark brown and Dark Drabber with equal parts regular developer (20 volume) for a level 4 Brown color.

• **For Gray coverage as a Blonde**
  Equal Parts Golden Blonde Warm and Golden Blonde Neutral on 85% gray hair with equal parts regular developer (20 volume)

• **For A beautiful deep burgundy color:**
  Equal Parts Bright Red and Black (*not* Black Pro)

• **For Highlights on level 7 or lighter:**
  Equal Parts Pearl Platinum and Light Ash Blonde with Extra Fast Developer (40 Volume)

• **For a pretty auburn Haircolor on light brown hair:**
  Three Parts golden Blonde Warm and One Part Warm Auburn with Regular Developer (20 Volume)

  ~ Mix Golden Blonde Warm with any red to make it Brighter
  ~ Apply full strength (1:1 ratio hair color to dev) to new growth
  ~ Apply with 10 volume to previously colored ends
  ~ For resistant grays apply full strength to new growth and diluted with water by half to the previously colored or porous ends. Put on a plastic cap. Then five minutes of heat with cap and process 40 more minutes with no heat (cap remains) - Processing time is a full 45 minutes.
  ~Mahogany Eggplant is a pinky red. Never use it alone, except on brunettes with no gray. Works well with medium brown or dark brown.

If you have any questions call EcoColors Inc. at (877) 852 4515 (Toll Free)
You can also reach 24/7 through our website at http://www.ecocolors.net