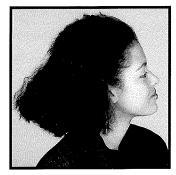
### 1 2

# CHEMICAL RELAXING

Chemical hair relaxing appeared early in the twentieth century as a means of controlling excessively curly hair. The first chemical relaxers were made of potash (wood ashes), lye, white potatoes and lard. The process was also known as a 'conk.' Mixed together, these ingredients produced a harsh mixture strong enough to chemically straighten overly curly hair. In its pure form, lye is a caustic chemical with a pH 14. It has the ability to eat away or erode the cuticle layer of the hair, making it very limp and straight, as well as easier to manage.

Because the mixture contained domestic household ingredients, it was an unstable formula that produced unpredictable results. The mixture was usually so strong that it caused hair loss and severe scalp burns. Yet, in spite of these risks, people were willing to accept the consequences in order to achieve the desired results.







"Did you know that Madam C. J. Walker was the first black female millionaire in the United States?"

With time, entertainers, athletes and other celebrities made the straightened look popular for both men and women. People saw clearly that chemical relaxing did more than simply control overly curly hair. It offered a variety of hairstyles as well.

In the early 1900s a temporary method of hair relaxing, called hair pressing, was conceived by Sarah Breedlove (1867-1919), who was better known as Madam C. J. Walker. After the hair was washed and

dried, petroleum jelly was applied. Then a metal comb, heated over a small gas burner, was pressed against and pulled through the hair using tension, temporarily straightening it. Refer to the "Hair-styling" chapter for more information on this straightening (pressing) method.

By the late 1950s, several commercially produced chemical relaxers were available. Even though they remained highly caustic with the potential to cause damage to hair and scalp, the new formulas were more consistent, making the results more predictable.

# **Chemical Relaxing Theory**



**CHEMICAL PHASE** 



**SMOOTHING PHASE** 



FINAL RESULT

Chemical relaxing involves two major phases: the chemical phase, which begins when the straightening product is applied to the hair, and the physical phase, which is smoothing the hair, rinsing the product from the hair and applying the neutralizer or neutralizing shampoo (also known as fixative or stabilizer). As you learned in the "Perming" section of this chapter, the neutralizer causes oxidation, which restores the broken disulfide bonds. Keep in mind that the chemical and physical phases of relaxing are of equal importance.

# Types of Relaxers

Although there are many types of relaxers used in the professional salon, there are two primary results, the first of which completely straightens the hair and the second of which reduces the curl pattern. The most common ingredient found in products that completely straighten the hair is sodium hydroxide. The most common ingredient found in products that reduce the curl pattern is ammonium thioglycolate (thio).



### Sodium Hydroxide

Sodium relaxers prior to the 1960s were called base relaxers. These relaxers required that a protective cream (base) be applied to the scalp prior to the relaxer service. Following the 1960s no-base chemical relaxers were developed. They have a high oil content (the base) and conditioning agents that help protect the hair and scalp from irritation. No-base chemical relaxers are generally the choice of salon professionals because they are gentler to the hair and scalp. Keep in mind, however, that they still contain a caustic chemical, so skill and thorough product knowledge are required. Appropriate use of base cream may still be needed for clients with sensitive scalps. Sodium hydroxide relaxers are also known as lye relaxers and have a ph of 10.5 - 14. Always follow manufacturer's directions.

# **Ammonium Thioglycolate**

Ammonium thioglycolate relaxers, also called thio relaxers, is a chemical reducing agent that causes the hair to soften and swell. Hydrogen and disulfide bonds in the hair are affected during this process. With the thioglycolate relaxer, the disulfide bonds break between the two sulfur atoms in the cystine amino acids. As you learned in "Perming," the neutralizing process causes the split cystine amino acids to rejoin.

#### Other Relaxers

No-lye relaxers contain a derivative of sodium hydroxide. No-lye relaxers contain calcium, potassium, guanidine, lithium hydroxide, or bisulfate as the active ingredient. The name, no-lye, derives from the fact that sodium hydroxide is not the active ingredient. No-lye chemical relaxers are usually recommended for less resistant hair and require frequent conditioning follow-up treatments. It is important to have an understanding of each of these relaxers so that you can choose the best product for your clients.

These relaxer formulas consist of three principle ingredients: an alkaline agent (sodium, potassium, lithium or guanidine hydroxide), oil (surfactants or surface-acting agents that protect the hair and scalp) and water, the active alkaline component. These components control the chemical relaxer's effectiveness and efficiency. It is important to remember that the formulation of the chemical relaxer requires quick application, processing and removal to prevent damage. Correctly applied, relaxers provide maximum straightening action as well as optimum conditioning effects with minimal or no scalp irritation or hair loss. As a result, the hair is soft, shiny and in good condition.

# Relaxer Strengths

During hair analysis, each client's hair should be properly assessed. The texture, porosity, elasticity, density, type and overall condition of the hair will determine the processing time and the proper relaxer strength to use. Refer to "Infection Control and Safety" in this chapter for more information on how to assess the hair for a chemical relaxer service.

Relaxer strengths for ammonium thioglycolate are usually categorized as mild (delicate), regular (normal), and super (resistant).

- Mild is used on healthy, color-treated hair, fine-textured or porous hair.
- Regular is used on curly to medium-textured hair.
- Super is used on overly curly, coarse-textured or resistant hair.

Semi-permanent hair color can be applied over hair that has been relaxed with sodium hydroxide. Hair color mixed with 20 volume (6%) developer or less can be applied to hair that has average porosity, is in good condition and has been straightened with a mild relaxer. Note that haircoloring services requiring hydrogen peroxide are not generally performed on the same day of the relaxer service. Follow manufacturer's directions for specific guidelines.



Do not apply sodium hydroxide relaxer to extremely porous hair that has been colored with permanent hair color or lightened hair (decolorized, bleached). Also, do not apply sodium hydroxide to hair that has been permed with ammonium thioglycolate or to hair that is going to be permed with ammonium thioglycolate. Multiple services performed over the hair reduces the number of bonds in the hair, which can cause severe breakage.

# Hair Analysis

Consider giving several preliminary tests before a chemical service to determine the hair's porosity, elasticity, density, texture and type. The information gained from these tests is necessary to help ensure successful results. As you perform these tests, carefully analyze the condition of the hair and

scalp. If the hair shows signs of breakage, postpone the service until the condition of the hair and/or scalp improves. Refer to the "Trichology" chapter for additional information on hair analysis testing.

### Porosity

Porosity refers to the ability of the hair to absorb liquids or chemicals. It's also one of the determining factors in selecting the appropriate chemical relaxer strength and processing time. The more porous the hair, the faster the hair will accept the product. With porous hair, choose a product that has a lower alkaline content. When the hair is more resistant, you will need to use a product with a higher alkaline content. The porosity test is also known as the finger test.



### **Elasticity**

Elasticity describes the hair's ability to stretch and return without breaking, much like the action of a rubber band. Elasticity can range from very good to very poor. If the hair flexes back and forth as it is gently pulled, it shows good elasticity. Hair with good elacticity can usually tolerate stronger chemicals, while hair with weaker elasticity requires milder chemicals. Note that if the hair lacks elasticity, chemicals should not be used. The elasticity test is also known as the pull test.

### Texture

Texture relates to the actual size or diameter of an individual hair strand. When analyzing the hair for a chemical relaxing service, texture can be categorized as fine, medium and coarse. It is common for one head of hair to have several different textures, such as very fine hair in the nape area and coarse hair in the crown. Therefore, it is important to test in several areas of the head with the proper strength of relaxer on the appropriate hair texture.

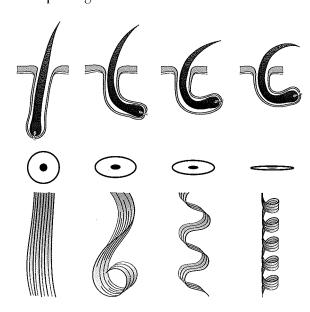
### Density

Density refers to the number of hair strands per square inch, which can be classified as either light, medium or heavy (sometimes thin, medium, thick). Knowing the density helps you determine what size partings to use during the relaxer application. Partings can range from 1/4" to 1/2" (.75 to 1.25 cm). For example, thick hair will require more partings than thin hair.

# Identifying and Changing Existing Curl Patterns

Natural curl patterns can be identified by their visual characteristics. The four major texture patterns that can be determined by the shape of the hair follicle are:

- Straight–Round Follicle
- Wavy-Oval Follicle
- Curly-Elliptical Follicle
- Overly Curly–Elliptical Follicle



1 2

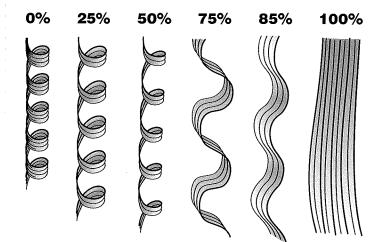
Each one of these types of texture patterns can be found in every ethnic race. It is also common for one head of hair to have several different texture patterns. Straight hair is also referred to as round-cell hair because of its round shape, and overly curly hair is also referred to as flat-cell hair because of its almost flat-like shape.

Generally, sodium hydroxide relaxers are used on curly, overly curly and resistant hair, while thio relaxers are used on wavy, curly or non-resistant hair.

Creating a reduced curl pattern consists of a chemical phase (applying the proper relaxer strength according to the hair type) and the physical phase (smoothing), while taking into consideration the existing curl pattern.

### **Stages of Reduction**

The following chart can be used as a guide when relaxing overly curly hair to achieve the new reduced curl pattern. Keep in mind that relaxing doesn't mean that you must remove 100% of the natural curl pattern, which could result in totally limp hair and even breakage.



### **Overly Curly Texture Pattern**

• 0%

### **Texturizing**

- · 25%-Minimum Relaxing
- 50%–Curl Diffusion (also known as chemical blow out)
- 75%–S-Curl Pattern

#### **Optimum Relaxing**

85%

#### **Over Processed**

100%

The following are steps that you can use to create the new curl pattern.

- Determine the Existing Curl Pattern Wavy, Curly, Overly Curly
- 2. Determine the Desired Curl Pattern Wavy, Curly
- 3. Choose the Formula

  Thio or Sodium (Mild, Regular, Super)
- 4. Determine processing time and amount of smoothing

### Chemical Phase

As mentioned earlier, the chemical phase of the relaxer service takes place when the chemical relaxer product is applied to the hair. There are three methods for applying the relaxer: the brush, comb or fingers. The relaxer product is applied to one or both sides of the strand.

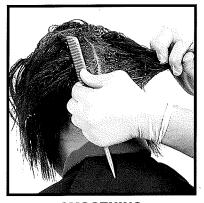
However, before applying the chemical relaxer product on the client's hair and scalp, it is important to protect the skin around the hairline and ears with a protective base cream (basing). Sometimes it is applied to the entire scalp if the client has a history of scalp sensitivity. Petroleum is the main ingredient in base creams. Body heat liquefies the base, providing a light, oily film that helps protect the scalp from irritation during chemical processing.



**APPLYING** 



**BASING** 



**SMOOTHING** 

# Physical Phase

The success or failure of a chemical relaxer service is strongly influenced by the physical phase of the service. The action of spreading the chemical relaxer through the hair with the back of a comb or your fingers as it processes is called smoothing. Smoothing redistributes the relaxer on the hair strand and helps relax and reform the bonds to a new straighter position.

#### **Relaxation Test**

The relaxation test, also known as the comb test, allows you to determine if additional smoothing is required. The relaxation test is performed with the back of the comb. The first step is to smooth excess product from the scalp area. The second step is to press the back of the comb against the scalp area to determine the degree of relaxation. If a minimal amount of indentation occurs, and the curl pattern reverts or "beads," additional smoothing may be required depending upon the desired results. If a strong amount of indentation occurs, the hair has thoroughly reached optimum relaxation. You are now ready to thoroughly rinse and blot the hair.



# **Relaxer Application Methods**

There are four basic methods of application, virgin relaxer, relaxer retouch, partial relaxer and curl diffusion.



A **virgin relaxer** is applied to untreated or 'virgin' hair. The chemical relaxer is applied to the most resistant area (usually the crown or lower) and 1/4" (.75 cm) to 1/2" (1.25 cm) away from the scalp area and up to the porous ends. Next, the product is applied to the scalp area, if necessary. Chemical relaxers have a tendency to spread toward the scalp due to body heat, so further application may not be needed. The hair is then smoothed with light, even strokes from the scalp to the ends.



A **relaxer retouch** uses the same procedures as a virgin application, except that the product is applied only to the new growth area at the scalp. Each major section may be outlined to assist in parting and product control. Avoid allowing the relaxer to come in contact with the previously treated hair. Contact with treated hair, known as overlapping, may result in breakage.



A partial relaxer is a virgin relaxer applied only to selected areas of the head. The partial relaxer technique is used mainly when the nape area and sides are closely tapered or when the perimeter hairline is frizzy. When used on tapered areas, it is applied every 2-3 weeks.



Curl diffusion, also known as chemical blow-out, is a technique used to loosen or relax overly curly hair patterns by approximately 50% of their natural shape. With this technique the chemical relaxer is applied and gently combed through the lengths for even distribution and coverage. As the hair is combed in its growth direction, you will need to carefully watch for the desired texture pattern. When

the hair attains the desired texture pattern, the product will need to be rinsed out before you apply a neutralizing shampoo. You will then need to comb the hair in the final style direction and allow it to air dry.

# **Rinsing and Blotting**

Because of the high alkalinity of relaxers, the hair must be rinsed for a long period of time to stop the chemical action and completely rid the hair of any chemical residues. It is important to check closely in the nape area and behind the ears, which are areas more difficult to rinse. Any chemicals left in the hair will remain active and could cause serious skin and/or hair damage.

The blotting process is also very important. Unlike perming when you blot the hair wrapped around the rods, the hair is now free and easier to blot. The blotting process allows you the opportunity to check carefully throughout the entire scalp area to detect any chemicals that have not been rinsed.

### Neutralizing

When you are certain the hair is free of chemicals, proceed with the neutralizing shampoo procedure. It is important to use an acid-balanced neutralizing shampoo or stabilizer to reharden (lock) the hair into its new, straight shape. Neutralizing shampoos or stabilizers contain an oxidizing agent, often sodium bromate or hydrogen peroxide. Always be guided by the manufacturer's instructions about how many times you must shampoo the hair and how long the product is to be left on the hair.

### **Timing Guide**

When the chemical relaxer is applied to the hair, it softens and swells the hair, allowing penetration through the cuticle into the cortical layer where the sulfur and hydrogen bonds are altered. These bonds contribute to the hair's elasticity, strength and resilience, while helping retain its curly state. How fast or how slow the chemical relaxer penetrates depends on the hair's texture and porosity. Coarse-texture hair generally has more cuticle and more cortex than fine hair, which slows product absorption. Slower absorption increases the processing time, especially if the hair is non-porous or highly resistant.

By contrast, fine-texture hair has more cuticle and less cortex. Initially, the relaxer product may take longer to penetrate to the cortex, yet the product can quickly damage the inner layer of hair. This type of hair requires a sound knowledge of its structure and the effects of chemicals on it. The following charts overview the different relaxer strengths and the timing for application.

### For Thio Relaxers (includes application and smoothing)

STRENGTH	CONDITION OF HAIR	TIMING	
Mild	Fine Texture Hair	Up to 15 Minutes	
Regular	Curly - Medium Texture Hair	Up to 20 Minutes	
Super	Overly Curly - Coarse Texture Hair	Up to 25 Minutes	

### For Hydroxide Relaxers (includes application and smoothing)

CONDITION OF HAIR	TIMING
Color Treated - Fine Texture Hair	Up to 10 - 15 Minutes
Curly - Medium Texture	Up to 15 Minutes
Curly - Coarse Texture Hair	Up to 20 Minutes
	Color Treated - Fine Texture Hair Curly - Medium Texture

# 12

# **Chemical Relaxing Essentials**

To deliver a professional chemical relaxing service, you need an organized selection of products, implements and equipment. Refer to Material Safety Data Sheets (MSDS) for all products used in the salon. Perm service equipment includes furnishings and provisions necessary to provide a professional service.

### **Chemical Relaxer Products**

FUNCTION
Protects scalp and hairline from caustic chemicals
Protects hairline and top of ears from caustic chemicals
Straightens overly curly hair
Rehardens and fixes hair in its new, straight shape
Restores moisture balance
Provides extra control and lasting quality of hairstyle
Provides extra flexibility and holding qualities of design

# **Chemical Relaxer Implements/Supplies**

IMPLEMENT/SUPPLIES	FUNCTION
Protective Shampoo Cape	Protects client from chemicals; large, loose protective covering fastened at the neck area
Cloth Towels	Absorb and remove water, relaxer product and neutralizer through blotting
Protective Gloves	Shield stylist's hands from chemicals during processing
Spatula	Removes relaxer and/or other products from containers for application, keeping supply of original product uncontaminated
Sectioning Clips	Hold hair in place in controlled sections for easier application of relaxer products

IMPLEMENT/SUPPLIES	FUNCTION
Applicator Brush	Applies relaxer to hair with less product waste, greater control and time savings
Tail Comb (non-metal)	Parts out sections of hair used for smoothing during processing.
Shampoo Comb	Distributes neutralizer through the hair, eliminating tangles and minimizing damage to swollen hair by using smooth, wide teeth of the comb
Bowl	Used to hold relaxer for application
Styling Implements	Provide manageability during styling

# **Chemical Relaxer Equipment**

EQUIPMENT	FUNCTION
Heat equipment: plastic cap, infrared lamps, hooded dryer	Provide and capture heat for conditioning services following relaxer service; help restore hair's structural integrity
Timer	Alerts stylist to check for maximum amount of time allowed for relaxer to be on hair and scalp; also for keeping check on neutralizing times as recommended by the manufacturer
Shampoo Bowl	Allows client's hair to be rinsed and shampooed; needed for rinsing relaxer chemicals and neutralizer from hair
Styling Chair	Provides adjustability for stylist's working needs and comfortable seating for client

# **Infection Control and Safety**

It is important to practice infection control and safety procedures in order to prevent the spread of any harmful bacteria. Always use sanitized combs, brushes and cutting implements for every client, every time.

### **Special Safety Considerations**

- 1. If a client experiences burning during a sodium hydroxide relaxer service, rinse the hair with warm water, apply neutralizing shampoo and proceed with remaining service.
- 2. Avoid brushing the hair before any chemical service.

- 3. Perform several test strands to avoid overprocessing.
- 4. Avoid pulling the hair, which can cause irritation and make the scalp sensitive.
- 5. Wear protective gloves during chemical services.
- 6. Never exceed timing guidelines.
- 7. Use caution while applying the chemical relaxer and prevent it from contacting the skin. If it accidentally gets on the skin, wash the area immediately with warm water and neutralizing shampoo.
- 8. If the chemical relaxer gets into the eyes, flush them thoroughly with lukewarm water and consult a physician immediately.
- 9. Never attempt to relax hair that has been bleached.
- 10. Never use sodium hydroxide to relax hair that has been treated with a thio product or vice versa. The results could be severe breakage and/or irreversible damage.
- 11. Apply relaxer evenly without missing any areas. If the relaxer is not evenly applied or if areas are missed, there will be an uneven pattern of straight or curly hair or ridges that could be hard to control.
- 12. Advise client not to shampoo before 48 hours of the chemical service. The natural oils can help protect the scalp.
- 13. Avoid performing any chemical services when any cuts, open sores or abrasions are present on the scalp.

# **Draping for a Chemical Service**

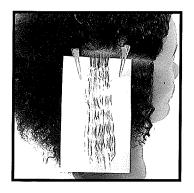
Refer to the "Perming" portion of this chapter for details on this draping procedure.

# NEVER leave a client while the hair is processing.

ALERT.

# **Testing for Metallic Salts**

Applying a relaxer over hair with metallic salts will cause severe damage if not a total destruction of the hair fiber. Therefore, it is critical to test the hair for metallic salts if you suspect they are present. Refer to "Test for Metallic Salts" in the "Perming" portion of this chapter.



# **Preliminary Strand Testing**

Strand testing evaluates the overall condition of the hair to determine if it can withstand the chemical service. To strand test, part off a small section of hair in the most resistant area of the head. Apply the chemical relaxer to the test strand. Follow the manufacturer's timing guide and check the test area frequently. Process (smooth) the hair to straighten it. Rinse, then use a neutralizing shampoo and towel dry the test area thoroughly. If the test strands did not relax enough, test in another area using a stronger relaxer strength.

# **Client Consultation**

Before applying any chemicals to the hair, conduct a thorough consultation with the client. You'll want to remember that a consultation is a two-way conversation between you and the client. Success comes from listening carefully and recording all the important information on the record card. As you may recall, some important considerations for a relaxing service include determining the new curl texture pattern that your client desires. Asking the client how much of the existing curl pattern he/she would like reduced and gathering your client's chemical relaxing history, such as any problems he/she may have had in the past, will enable you to make the proper decisions during the consultation phase.

The five steps of the consultation are:

#### Greet

### Ask, analyze and assess

 Have the client sign the Release Form before the service begins. A standard Release Form, required by some malpractice insurance companies, states that the school or salon is not responsible for damages that may occur.

### Agree

### Deliver

### Complete

 Complete the client record card with accurate information for future services and file it in a secure area with other record cards.

Review the "Perming" portion of this chapter and the "Design Decisions" chapter for more information on Client Consultation.

	Phone Number	
Address	City, State, Zip	
	I request a relaxer and I fully understand that this ser be given by a student of cosmetalogy at Your Name Be	
	I hereby express my willingness for a student to do this world	c. Í furthermore
		c. Í furthermore
Nitness	I hereby express my willingness for a student to do this work understand that I will assume full responsibility th	s. Í furthermore ereof.

Date	Wrop	Rod Size	Products	Process Time	Results
			Booster Reformation		Good Poor Too Tight Too Loose
Length	on of Hair Density	Texture	Porosity	Tress-Tester Results	Test Curl Results
◆Short ◆Medium	•Light •Medium		Average Resistant	Strength  Stretch	Negotive     Positive
•Neatum •Long	•Meavy		• Extreme Porosity	*Sirerch	• POSITIVE
Medicatio	ns				
Vitamins .					
Comment	·				
Home Ca	re				

# **Product and Application Overview**

In this portion of the chapter you will overview the relaxer products and application techniques you will perform in the exercises that follow. These products and application techniques will help prepare you for the chemical relaxer services you'll encounter in the salon.

The following chart summarizes and categorizes the different types of relaxers along with their advantages and disadvantages. This chart can be used as a guide when choosing the proper relaxer for any type of hair. The strength of the relaxer must also be considered.

Note: prior to thio application, the hair should be pre-shampooed and base applied only to the hairline and ears. Whereas, for sodium hydroxide application, the hair should not be pre-shampooed and base should be applied to the entire hairline, scalp and ears.

#### **ADVANTAGE** DISADVANTAGE (listed by main ingredient) Sodium Hydroxide Faster processing time; Irritates the scalp; may Category: Lye, Base better for resistant hair cause severe damage; strict pH: 10.5 - 14 and/or coarse hair time constraints; requires base application Sodium Hydroxide Faster processing time; Irritates the scalp; may cause Category: Lye, No Base better for resistant hair severe damage; strict time pH: 10.5 - 14 and/or coarse hair constraints Calcium or Potassium Better for less-resistant hair; May be more drying; slower Hydroxide less irritating to scalp processing time; requires Category: No Lye frequent conditioning treatments Guanidine Hydroxide Better for less-resistant hair; Processes slowly; not recom-Category: No Lye, Mix less irritating to scalp mended for overly curly hair (contain calcium hydroxide and guanidine carbonate) Lithium Hydroxide Better for less-resistant hair; Processes slowly; not recom-Category: No Lye, No Mix less irritating to scalp mended for overly curly hair Ammonium Bisulfate Better for less resistant hair Requires the addition of heat; Category: No Lye, No Mix not recommended for overly curly hair **Ammonium Thioglycolate** Better for less resistant hair; Not recommended for overly more control due to processcurly hair ing time; better for fragile, fine or tinted hair

TYPE AND DESCRIPTION



Never apply a thio relaxer over hair that has been relaxed with a sodium hydroxide relaxer or vice versa, since these two chemicals are not compatible. Severe damage and breakage can occur.

# **Relaxing Application Techniques**

A chemical relaxer should be considered part of a total design. The final design that you choose should complement the shape of the haircut as well as your client's wishes. Here we've overviewed the application techniques you will learn in this portion of the chapter.





**Virgin Application**MIDSTRAND, BASE THEN ENDS

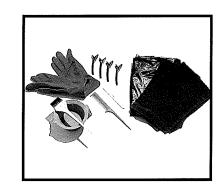




**Retouch Application**BASE ONLY

# Virgin Sodium Hydroxide Relaxer

Sodium hydroxide relaxers can be used on any type of hair but are especially designed for overly curly hair. A sodium hydroxide relaxer is a progressive product, which means that once you apply the product, the hair cannot return to its original state nor can you perform a curl reformation service afterward. Therefore, a sodium hydroxide relaxer is used to permanently straighten the hair.



For a virgin application of a sodium hydroxide relaxer, the product is applied to the most resistant area and 1/4" (.75 cm)

to 1/2" (1.25 cm) away from the scalp up to the porous ends. To ensure a thorough application, partings should be approximately 1/4" (.75 cm) and product should be applied to both sides of the strand. The heat from the scalp will allow the product to spread upward toward the scalp. However, if you need to apply product closer to the scalp, do so only after you have applied it to the midstrand throughout the head first. Never apply product directly on the scalp. The relaxer product is applied to the perimeter hairline last since the hairline is sensitive to breakage and is usually finer in texture.

The above application procedure is a guideline. However, other application techniques are also acceptable. For example:

- You may begin the application at the ridge of the first curl.
- To equalize processing time on long hair, you may begin application farther away from the scalp to avoid overprocessing the hair.

Your instructor may have additional guidelines that are equally acceptable for you to follow.

# Virgin Sodium Hydroxide Relaxer Guidelines

- Perform strand test.
- Disinfect work station; arrange implements and supplies including sectioning clips, non-metal tail comb, gloves, base, sodium hydroxide relaxer, bowl and brush.
- Wash and sanitize your hands; drape the client for a chemical service; perform analysis of
  hair and scalp; wear protective gloves and chemical apron; review previous client record
  card, if applicable.
- Do not pre-shampoo the client's hair.
- Section the hair into 4 or 5 sections, base the hairline, ears and scalp.
- Begin the application of the relaxer at the most resistant area. Use 1/4" (.75 cm) partings and apply the relaxer 1/4" (.75 cm) to 1/2" (1.25 cm) or farther away from the scalp up to the porous ends.
- Complete the entire head and follow manufacturer's directions for processing.
- Apply relaxer to the scalp area and ends, if necessary. Smooth each parting with back of the comb using a light to moderate smoothing action from scalp to ends.
- Perform comb test. If minimal indentation occurs, continue smoothing to achieve desired texture pattern. If strong indentation occurs, proceed to rinsing.
- Rinse thoroughly with warm water, and without scalp manipulations, until water runs clear.
   Direct the water spray away from the client's face. Follow with neutralizing shampoo.
- Condition the hair. Then you may wish to cut the hair wet or dry. Style the hair as desired.
- Complete client record card; offer your client a rebook visit; recommend retail products that
  will enhance or maintain the relaxer service; disinfect implements, discard non-reusable
  supplies and clean your work area.







# Virgin Thio Relaxer

When you are working with a thio relaxer, the first-time application is applied to the most resistant area and 1/4" (.75 cm) to 1/2" (1.25cm) away from the scalp out to the porous ends. Additional product may

then be applied at the base (scalp area) if necessary. Product is applied to the base last since the hair near the scalp will process more quickly due to body heat. A non-alkaline shampoo is recommended after the chemical relaxer has been rinsed from the hair. The natural oils that are removed during the chemical relaxing process are replaced with a conditioning treatment. In this exercise a thio relaxer is used within five sections. Horizontal partings are used for the back, side and top sections. A bowl and brush method is used.

The above application procedure is a guideline. However, other application techniques are also acceptable. For example:

- You may begin the application at the ridge of the first curl, which may be farther from the scalp.
- To equalize processing time on long hair, you may begin application farther away from the scalp to avoid over processing the hair.

Your instructor may have additional guidelines that are equally acceptable for you to follow.

# Virgin Thio Relaxer Preparation

As with any professional service, it is important to have your area, products, implements and equipment in proper order. Before performing a virgin thio relaxer service, be sure to satisfy the following points:

- Perform analysis of hair and scalp
- Perform strand test and elasticity test
- Clean work station with disinfectant
- Arrange implements/supplies including sectioning clips, non-metal tail comb, gloves, base, relaxer, bowl and brush
- Wash your hands with liquid antibacterial soap
- Ask the client to remove jewelry and store in a secure place
- Drape your client for a chemical service
- Shampoo client's hair lightly; do not sensitize the scalp

# Virgin Thio Relaxer Procedure

- Section hair for control
- Apply base (protective cream) around hairline and ears
- Begin at back top section or where hair is most resistant
- Use 1/4" (.75cm) horizontal partings
- Apply relaxer 1/4" (.75 cm) to 1/2" (1.25 cm) away from the scalp to both sides of the strand up to the porous ends
- Work from top to bottom of each section and complete back sections
- Move to back of top section
- Complete top section

- Move to sides and repeat same techniques
- Complete sides
- Comb, then smooth each section with back of comb using smooth, light, even strokes from scalp to ends
- Comb and smooth all sections
- Perform comb test
- If an indentation occurs, continue smoothing
- Follow manufacturer's directions for processing
- Once the hair has reached desired degree of relaxation, rinse relaxer from the hair until water runs clear

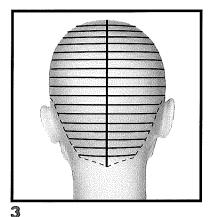
### **Virgin Thio Relaxer**

**1-2.** Section the hair into five sections for control. Subdivide the back in half. Subdivide the front into three sections, top and sides. Apply base (protective cream) to the entire hairline and ears.

3-4. Begin at the back top section or where the hair is the most resistant. Use 1/4" (.75) horizontal partings. Apply relaxer 1/4" (.75 cm) to 1/2" (1.25 cm) away from the scalp up to the porous ends to both sides of the strand. Do not touch the scalp with the tail of the comb or brush while parting. Work from the top to the bottom of each section. Then bring each parting down. Complete the back sections using the same techniques.





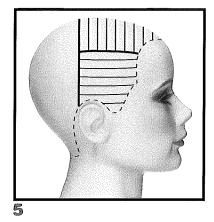




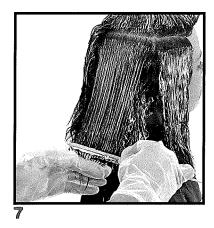
### Optional

Application methods for a virgin thio relaxer may vary. Product may be applied directly from the scalp to the ends. Follow manufacturer's directions and your regulating agency for specific guidelines. And remember, always do a complete hair/scalp analysis prior to beginning a relaxer service.



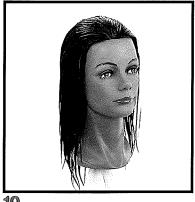












# Virgin Thio Relaxer Completion

- Complete client record card
- Offer a rebook visit to your client
- Recommend retail products to your client
- Discard non-reusable materials, disinfect implements and arrange work station in proper order
- Wash your hands with liquid antibacterial soap

5-6. Move to the back of the top section. Apply the relaxer using the same techniques. Complete the top section. Move to the sides and apply the relaxer from horizontal partings using the same techniques. Complete the sides.

7-8. Comb, then smooth each section with the back of the comb using smooth, light, even strokes from scalp to ends. Reapply product if necessary near the scalp. Comb and smooth all sections. Close up the sectioning lines by combing the hair between the major partings.

9-10. Perform comb test. If an indentation occurs, continue smoothing. Follow manufacturer's directions for processing. Once the hair has reached the desired degree of relaxation, approximately 85%, rinse the relaxer from the hair until the water runs clear. Apply neutralizer/stabilizer and follow manufacturer's directions for processing. Condition and finish the hair as desired.

Optional: An alternative application method includes applying product to one side of the strand only as shown on the DVD. Therefore, be guided by your instructor and regulating agency.

# Relaxer Retouch

A retouch should be performed when there is a sufficient amount of new growth, generally not more than one inch (2.5 cm), to avoid overlapping the product onto the previously straightened hair. All the same procedures are followed as with the virgin application except that the relaxer is applied to the new growth only. The retouch applica-







tion is performed with the same product that was used for the previous application. The product is applied slightly away from the scalp up to the previously relaxed hair. Applying the product beyond the new growth, onto the previously relaxed hair, is known as overlapping. Overlapping can cause breakage to the hair. In this exercise, horizontal partings within five sections are used throughout. The relaxer is applied to the new growth only. A protective cream is applied to shield the previously relaxed hair from relaxer and product run off during rinsing.

# Relaxer Retouch Preparation

As with any professional service, it is important to have your area, products, implements and equipment in proper order. Before performing a chemical reforming service, be sure to satisfy the following points:

- Perform analysis of hair and scalp
- Perform strand test and elasticity test
- Clean work station with disinfectant
- Arrange implements/supplies including sectioning clips, tail comb, gloves, base, relaxer, protective cream, bowl and brush
- Wash your hands with liquid antibacterial soap
- Ask the client to remove jewelry and store in a secure place
- Drape your client for a chemical service

### Note:

For a thio retouch application, preshampoo the hair lightly without scalp manipulations; do not base scalp

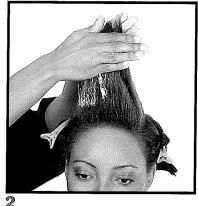
For a sodium hydroxide retouch application, do not pre-shampoo the hair; base the scalp

# Relaxer Retouch Procedure

- Section hair for control
- Apply protective cream to previously relaxed hair
- Begin at top back section or most resistant area
- Use 1/4" (.75 cm) horizontal partings
- Apply product slightly away from scalp up to previously relaxed hair to both sides of the parting
- Complete back sections

- Complete remaining sections using the same procedures
- Follow manufacturer's directions for processing
- Smooth each section with back of comb
- Follow manufacturer's directions for processing and perform comb test
- Rinse the hair until water runs clear after you have reached the desired degree of relaxation
- Shampoo hair with a neutralizing shampoo













# Sodium Hydroxide Relaxer Retouch

- **1.** Section the hair into five sections for control. Divide the back from the front. Subdivide the back in half. Subdivide the front into three sections, top and sides. Apply base around the entire hairline. Apply base to the scalp using a checker-board pattern.
- **2.** Apply a protective cream or conditioning filler to the previously relaxed hair. This will protect the previously treated hair from the chemical product.
- 3. Begin at the top back section or the most resistant area and use 1/4" (.75 cm) horizontal partings. Apply product slightly away from the scalp up to the previously relaxed hair to both sides of the parting. Work from the top to the bottom of each section. Do not touch the scalp with the tail of the comb or brush. Do not apply the product directly onto the scalp. Complete back sections. As you complete each section, bring the hair down.
- **4.** Move to the top section. Use the same procedures from horizontal partings. Work from the back of the section to the front hairline.
- 5. Complete remaining sections using the same procedures. Use horizontal partings at the sides. Follow manufacturer's directions for processing.
- 6. Smooth each section with the back of the comb using the same parting pattern. Follow manufacturer's directions for processing and perform comb test. Rinse the hair until the water runs clear after you have reached the desired degree of relaxation. Shampoo the hair with a neutralizing shampoo. Condition and finish the hair as desired.

Optional: An alternative application method includes applying product to one side of the strand only as shown on the DVD. Therefore, be guided by your instructor and regulating agency.