

$r = 49$
 $S = 9639,1$
 $(\frac{s+2r}{n}) = (\frac{t+2a}{n}) < (\frac{t+2a}{n})$

Ph-CH(OH)-CH3 + 2CrO3 + 3H2SO4 -> 3 Ph-C(=O)-CH3 + C

$(a+b) \cdot (a-b) = a^2 - b^2$
 $P(x) = 2x \cdot 50$
 $2x^3 + 8^4 + 4 = 245x$

$x = 3$
 $y = 4$
 $x \cdot y = 12$

$V = \frac{1}{3} \cdot Sp \cdot v$
 $S = Sp + Spl$

$y + x + z = A \cdot b$

$x - y = z$
 $5 \times 5 = 25$
 $(\frac{20+2}{4}) = 5,5$
 $8 = 2 + x$
 $ABx^2 = 0$

$\frac{1}{6} V (S_1 + 4S_2 + S_3)$
 $K = \frac{V_2}{V_1} = \frac{\sqrt{P_2}}{\sqrt{P_1}} \cdot S^{\frac{a}{2}}$

$\pi(x) = \sum \frac{\mu(n)}{n} \pi(x^{\frac{1}{n}})$
 $= \pi(x) - \frac{1}{2} \pi(x^{\frac{1}{2}}) - \frac{1}{3} \pi(x^{\frac{1}{3}}) - \frac{1}{5}$
 $+ \frac{1}{6} \pi(x^{\frac{1}{6}})$

$\int \frac{e^{-ve}}{\sqrt{a^2+b^2}} \frac{-b \pm \sqrt{b^2-4a \frac{dy}{dx}}}{2\sqrt{a^2+b \frac{\pi^1}{2} a}} \lim_{n \rightarrow \infty} (1 + \frac{1}{n})^n$

Ph-CH(OH)-CH3 + 2CrO3 + 2H2SO4



The things you need to know:



COLORIMETRY

Hair

+

pH

Product

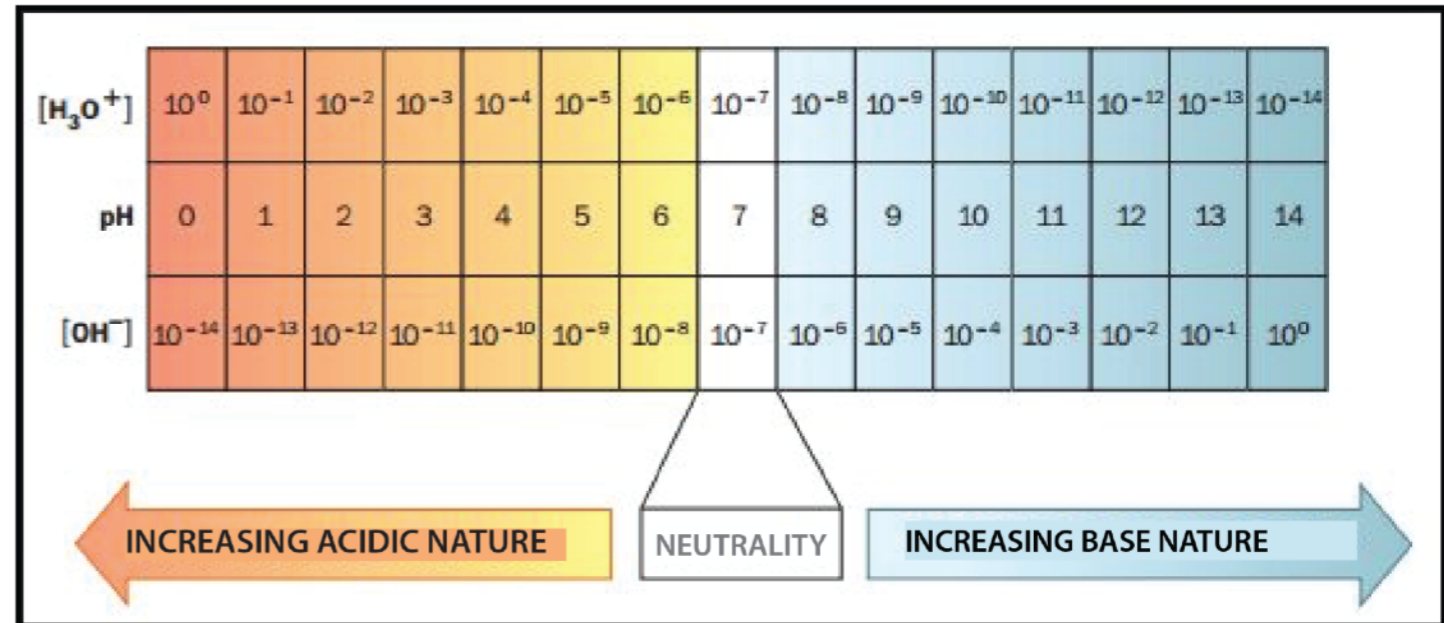
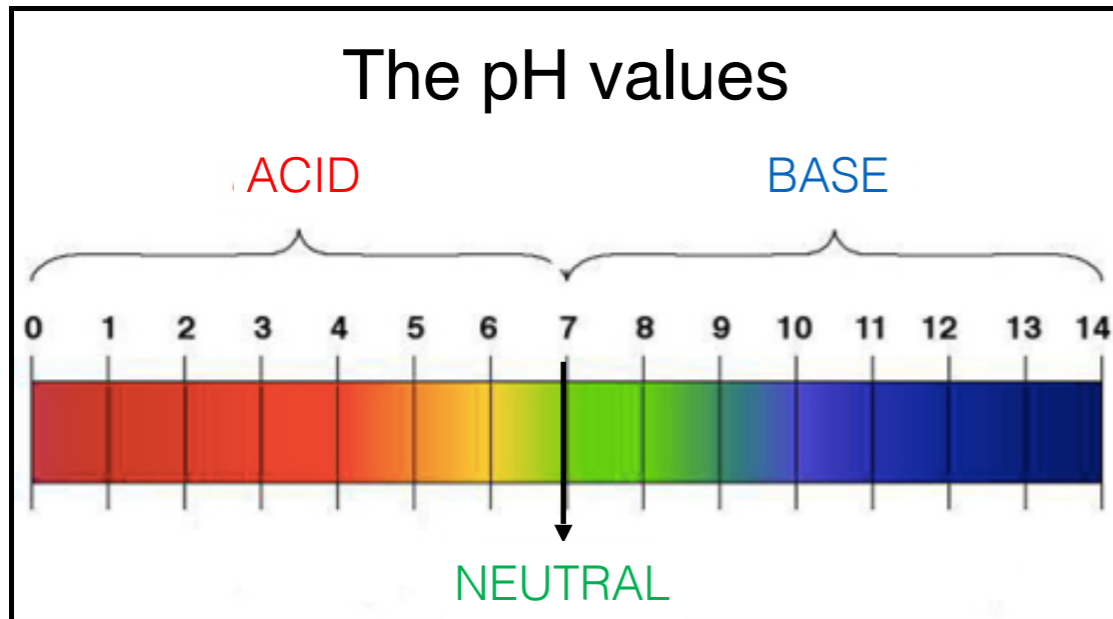
Method

COLOR TECHNIQUE

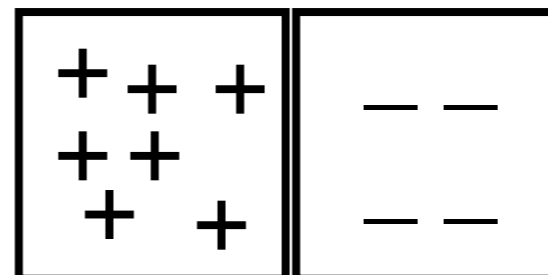
Hair and pH

pH: degree of acidity or alkalinity of an aqueous solution

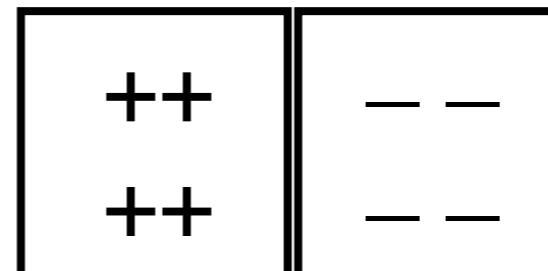
Measurement of the pH is carried out only in an aqueous solution



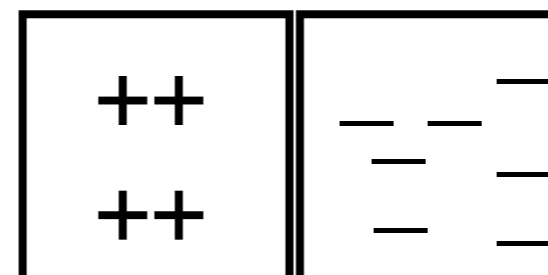
- Hydrogen peroxide / permanent fixing
- Conditioning and treatments
- Skin and Hair
- Distilled water
- Coloring / Permanents
- Bleaching



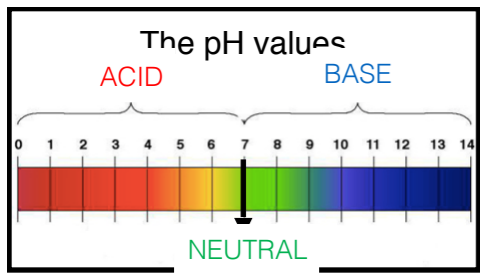
Acid



Neutral



Alkaline or Base



Hair and pH



Hydrogen peroxide / permanent fixing pH 2.5 - 3



PBF COLOR
Developer

Conditioners and direct coloring treatments pH 4 - 5



PBF CAREFORCOLOR
Universal, Brown-Blonde-Red



PBF COLOR MOLECULAR AND CRAZY
Direct color without oxidiser



PBF COLOR REMOVER
Bi-phase treatment for removing and modifying the artificial color

Skin / Hair / Shampoo pH: 5 - 6



PBF CAREFORCOLOR
Brown-Blonde-Red-Grey&White



PBF COLOR LUMINITY, TONER, BLONDEOMBRE'
Demi-permanent colouring ammonia-free



PBF COLOR ABSOLUTE AND SUPERBLOND
Permanent coloring

Oxidizing coloring / Permanents pH 9.5 - 10.5

Bleaching pH 11

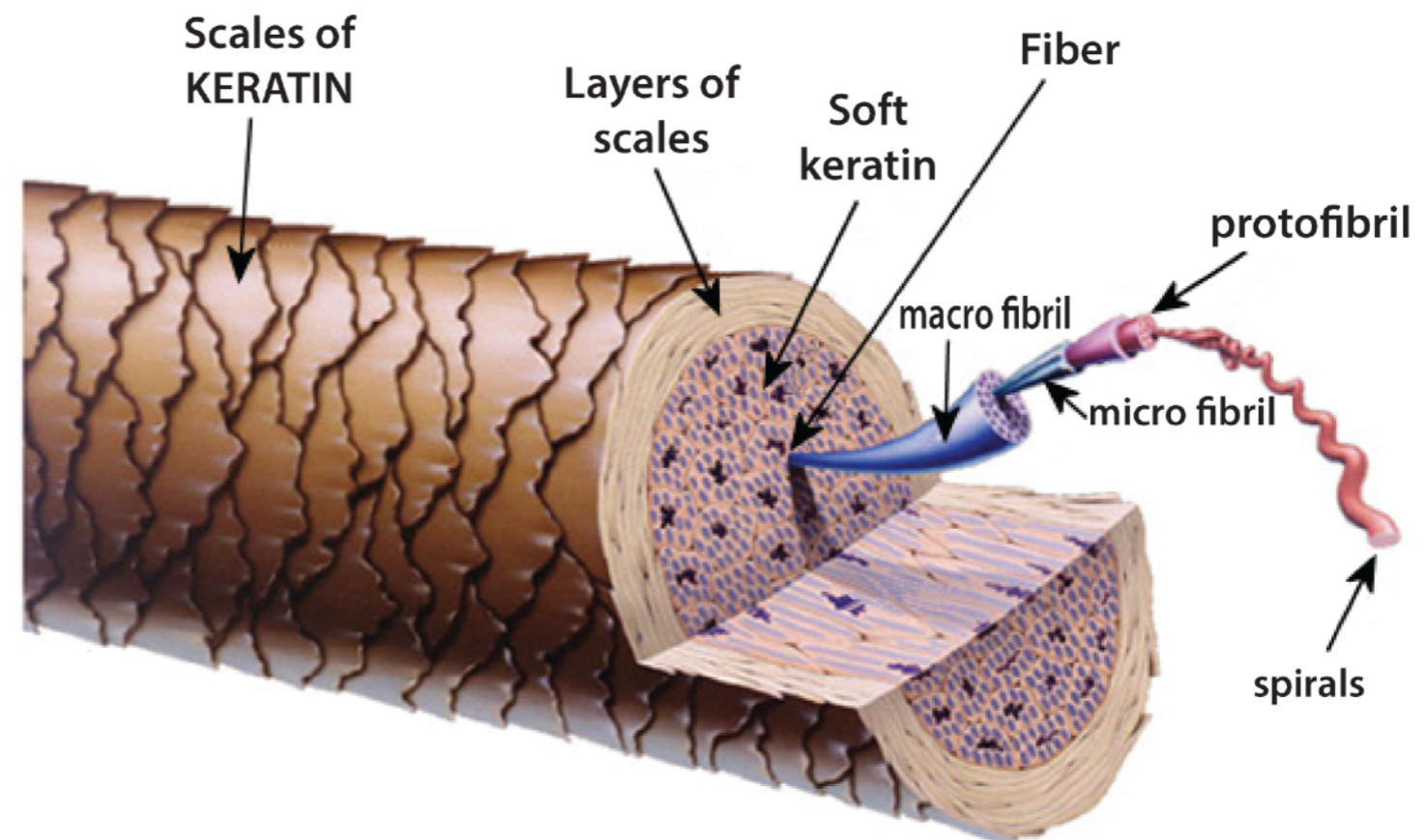


PBF COLOR BLONDE
Bleaching and lightening system

Hair

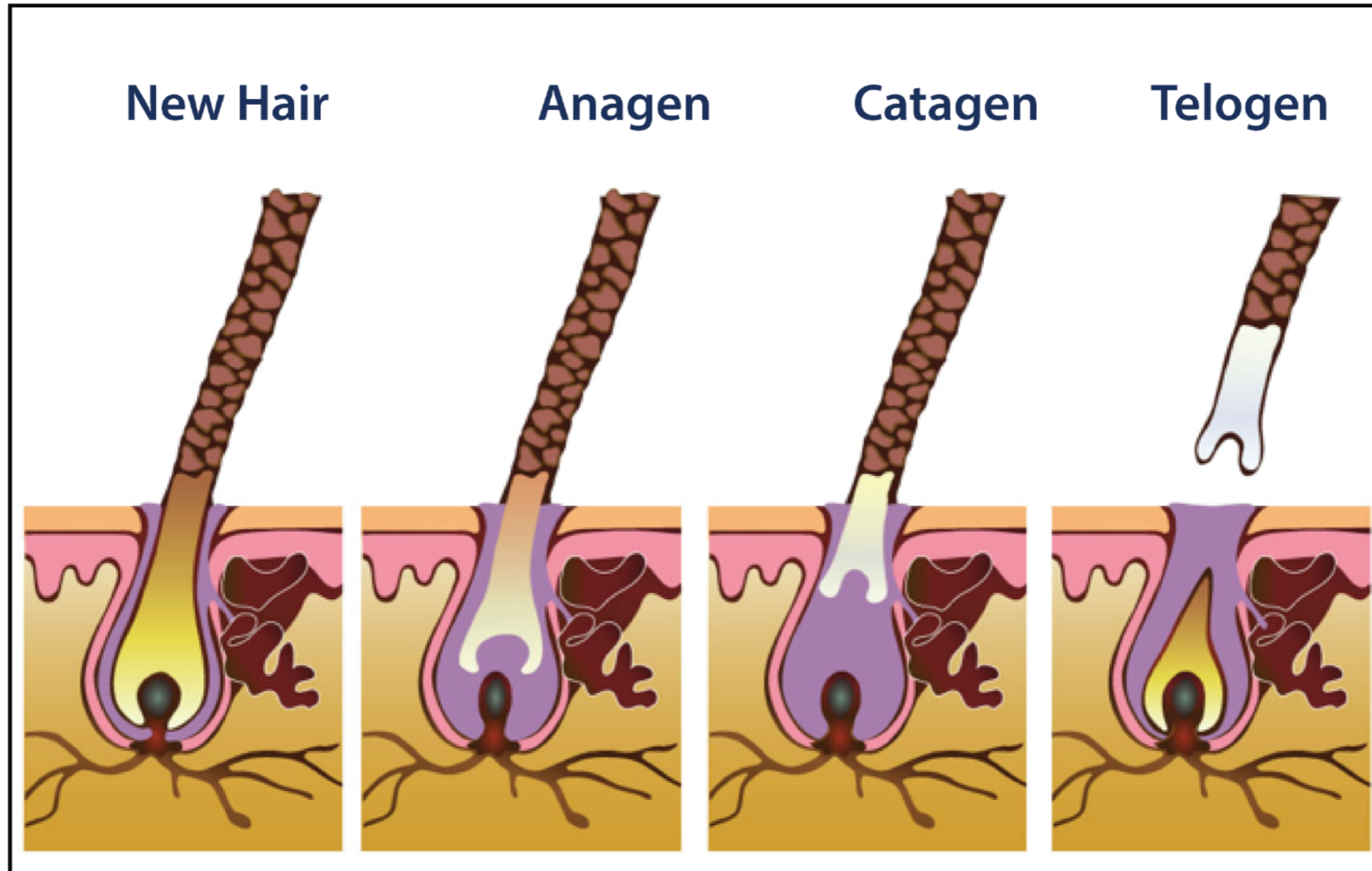
The molecular composition of the Hair

Molecule	%
Protein	70-80
Water	11
Mineral salts	8
Lipids	3
Glucides	0.1 - 0.5

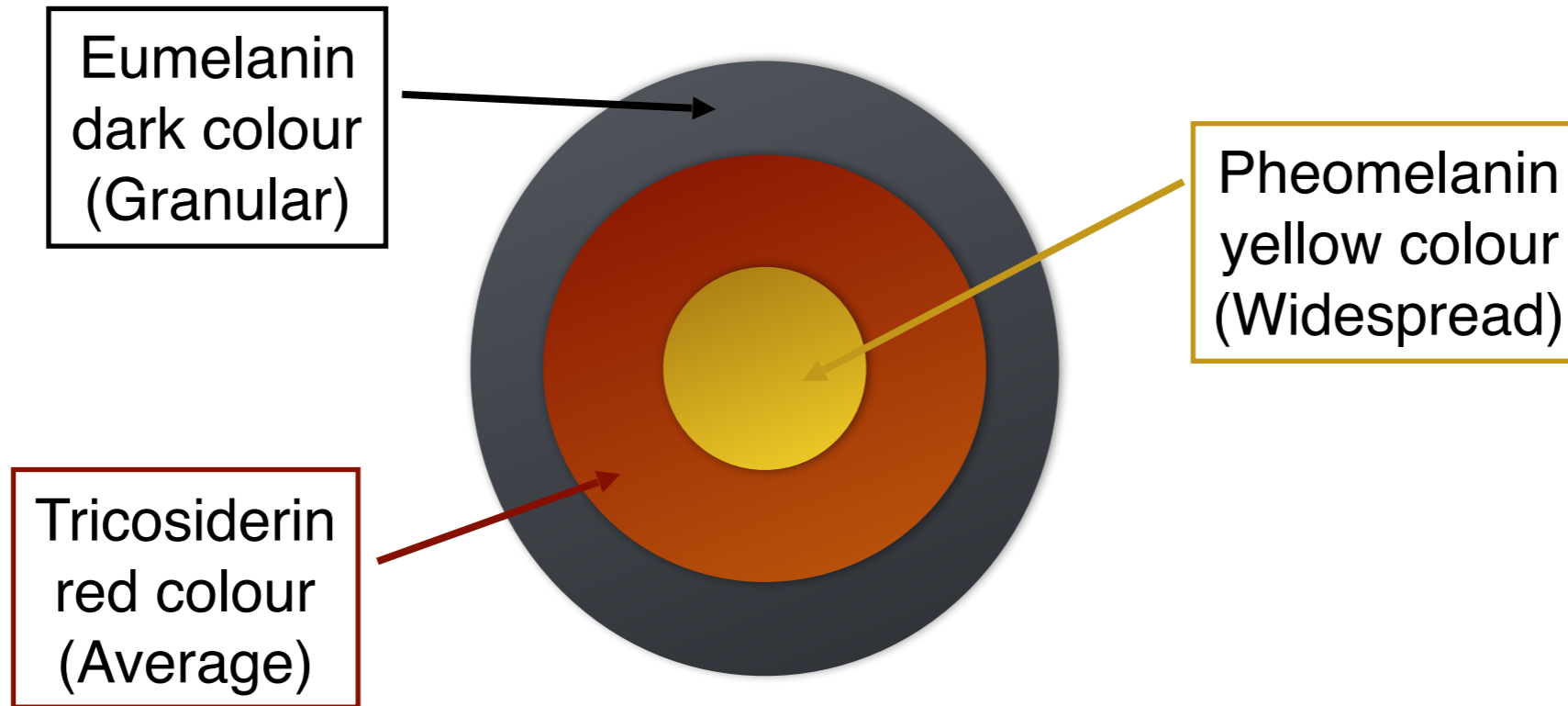


Hair

Life cycles of the Hair



Hair



	Eumelanin	Tricosiderin	feomelanin	neutral
Black	58%	35%	4%	3%
Brown	52%	32%	9%	7%
Dark Chestnut	46%	30%	14%	10%
Medium Chestnut	40%	27%	19%	14%
Light Chestnut	34%	24%	24%	18%
Dark blond	26%	24%	28%	22%
Medium blond	20%	21%	33%	26%
Light blond	15%	16%	40%	29%
Light blond Mo	9%	14%	43%	34%
Platinum blond	3%	9%	51%	37%

Characteristics of the Hair



- Thick
- Average
- Thin

- Porous
- Hygroscopic + / -
- Refractory
- Curly

- Straight
- Wavy
- Wavy
- Curly

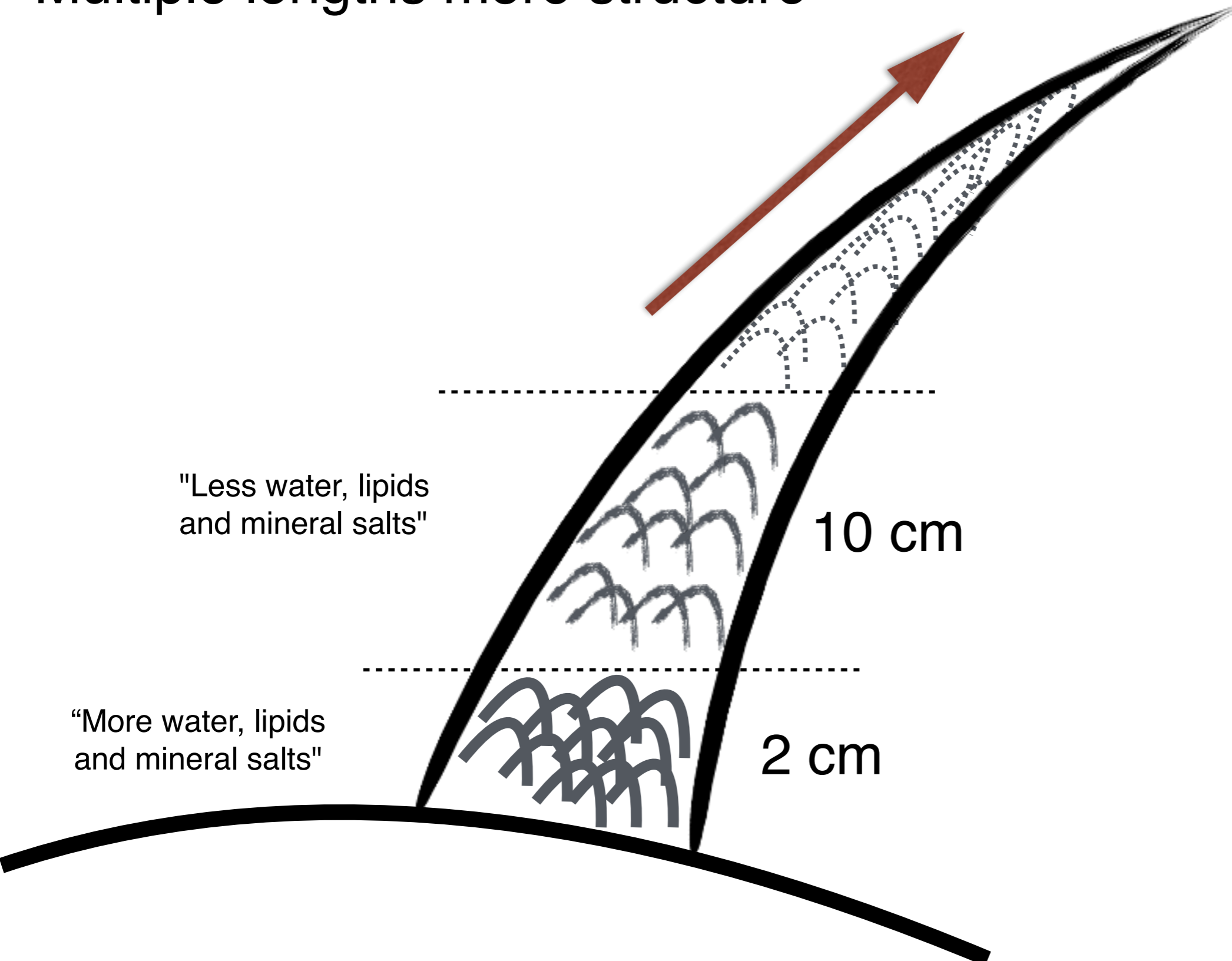
Agents that influence the structure of the Hair



- Mechanical
- Environmental
- Health
- Temperature
- Humidity
- Chemical treatments

Hair

"Multiple lengths more structure"



"Less water, lipids
and mineral salts"

10 cm

"More water, lipids
and mineral salts"

2 cm

The types of coloring

Direct coloring



Oxidizing coloring



Direct Coloring



Contains already colored molecules called **Nitrocoloranti**, derivatives of **Nitro-Benzene**

Temporary

Shampoo - mousse - liquids

Colored molecules of large dimensions, positively charged, which adhere to the hair through electrostatic bonds

They are not mixed with developers

Duration 1-2 washings

They give mild reflections to natural, grey, white and colored hair, exalting its gloss and shine

Semi-permanent

Cream - Gel - Mousse

Colored molecules of small dimensions that are deposited among the cuticular scales

They are not mixed with developers

Duration 5-8 washings

They give tone on tone reflections to natural, grey, white and colored hair for toning, maintenance and balancing, re-pigmentation and customized treatments

Direct Coloring



Temporary



CareForColor

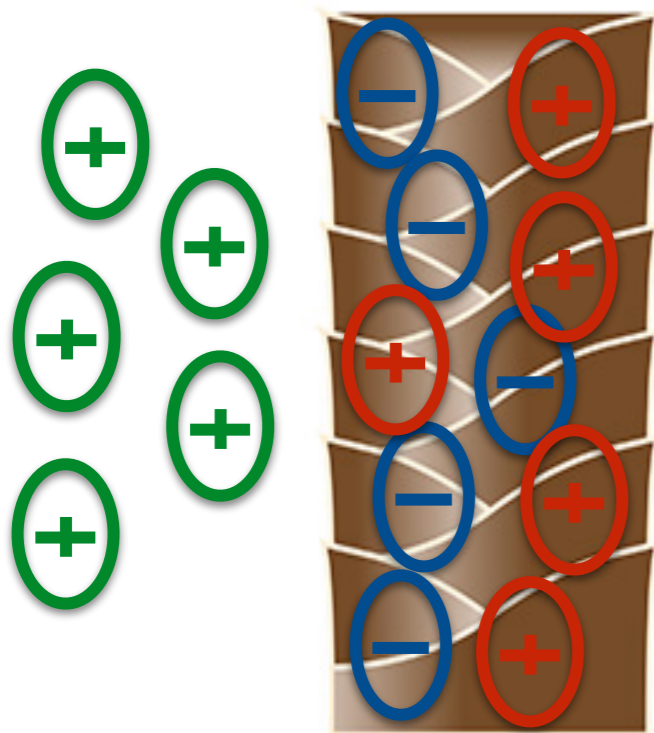
Semi-permanent



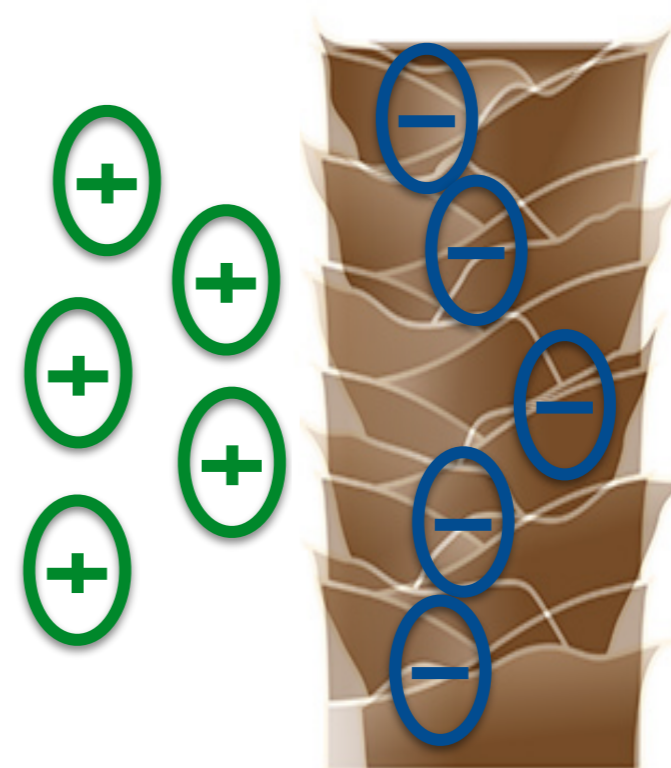
Molecular Colors



Crazy



"Reduced quantities of coloring agents that act through electrostatic charges in the outermost part of the hair"



"High concentration of coloring agents that act among the cuticle and cortex through electrostatic charges"

Direct Coloring



Temporary

	GREY HAIR	NATURAL HAIR	COLORED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
SHAMPOO GLACIAL					
SHAMPOO GREY & WHITE					
PRO MASK					
GREY & WHITE PERFECTION COLOR SPRAY					



Direct Coloring

Semi-permanent



<p>MOLECULAR COLORS</p>   <p>25"</p>	<p>COWASH</p>  	<p>COLOR PRO</p>  	<p>MOLECULAR COLORS</p>   <p>5" - 25"</p>	<p>COLOR PRO</p>  
<p>CRAZY</p>   <p>30"</p>	<p>CARE FOR COLOR SHAMPOO</p>  	<p>COLOR PRO</p>  	<p>CRAZY</p>   <p>5" - 30"</p>	<p>CARE FOR COLOR SHAMPOO</p>  

Molecular Colors



Crazy



	GREY HAIR	NATURAL HAIR	COLORED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR

Oxidizing Coloring



provides for the use of coloring creams containing the precursors (bases and couplers) of the color that are activated by mixing with oxidizers

Demi-permanent

Cream - Gel

Less invasive action
ammonia-free

Does not lighten and is used at
low volumes

Vibrant tone on tone colors, toning,
balancing over length, customized
treatments
partially covers grey hair

Permanent

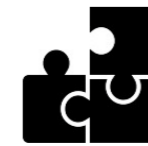
Cream - Gel

Allows you to obtain any colour
more invasive action

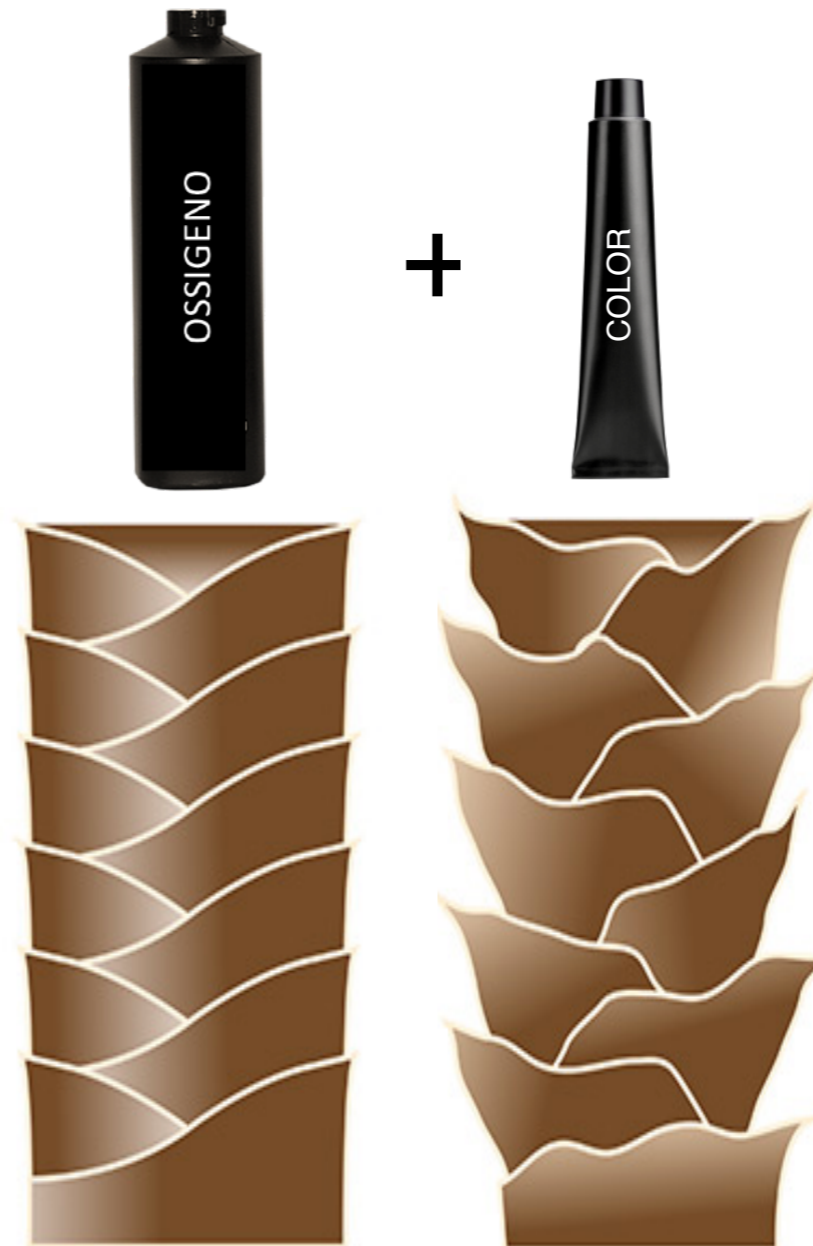
With all the concentrations
of oxidants

Gives any color to the hair
and covers grey hair 100%

Oxidizing Coloring



- **HYDROGEN PEROXIDE**
Fluid emulsion with acidic pH,
based on hydrogen peroxide
stabilized at various volumes
PROTECTIVE SUBSTANCES



COMPONENTS

- **BASE TREATMENT**
Mix of waxes, oils, alcohols,
fats, surfactants

- **ALKALIZING AGENTS**
Substances with pH from 7.1 to 14
The most commonly used:

- Ammonia
- Monoethanolamine

- **COLORANTS**
Micro molecule

- **SOLVENTS**
water, glycols and oils

The Chromatic Scale



* Cosmetic colour + RPC = Final result

Roux Porosity Control:
conditioners and proteins

* Dark color prevails over light color

* Cosmetic color, does not lighten Cosmetic color

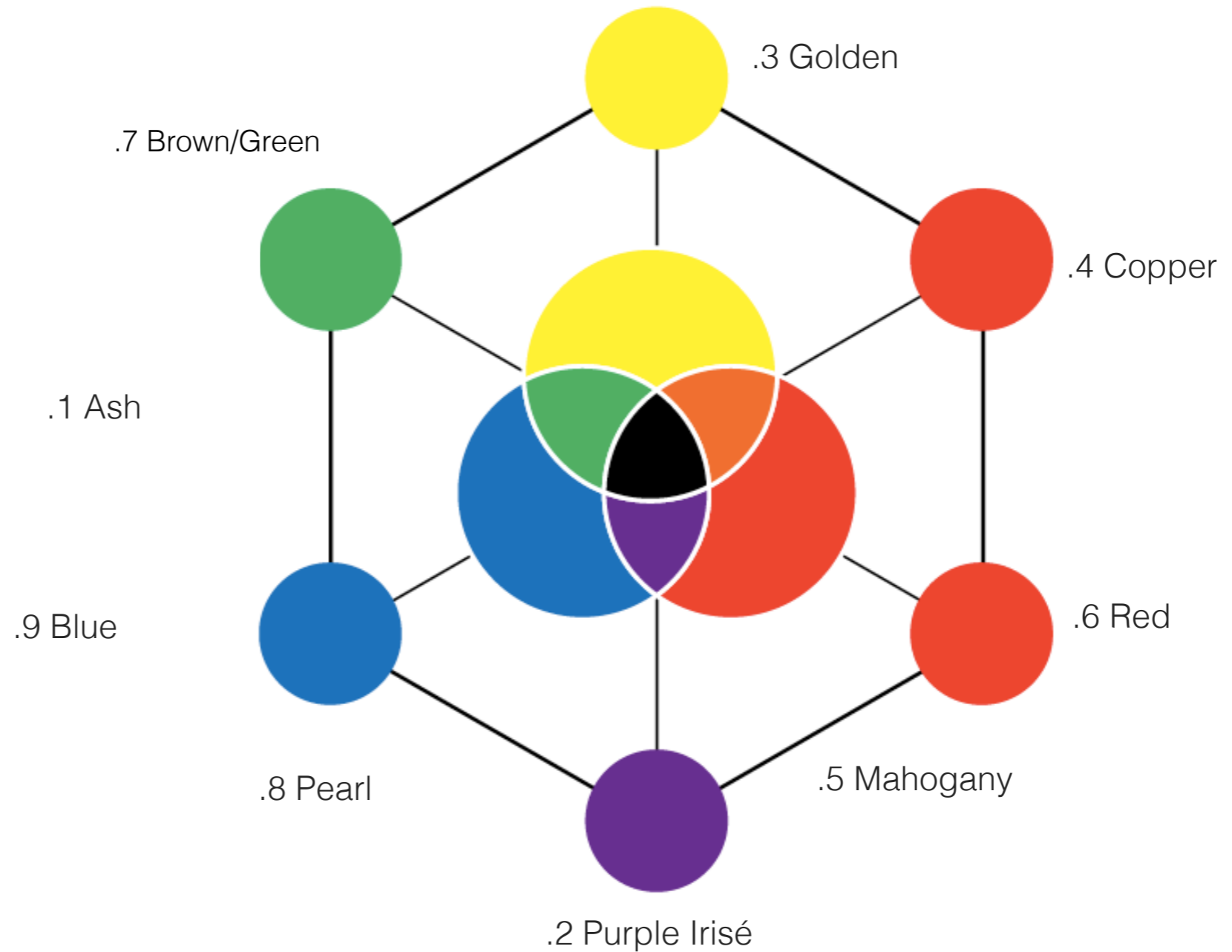


The color map



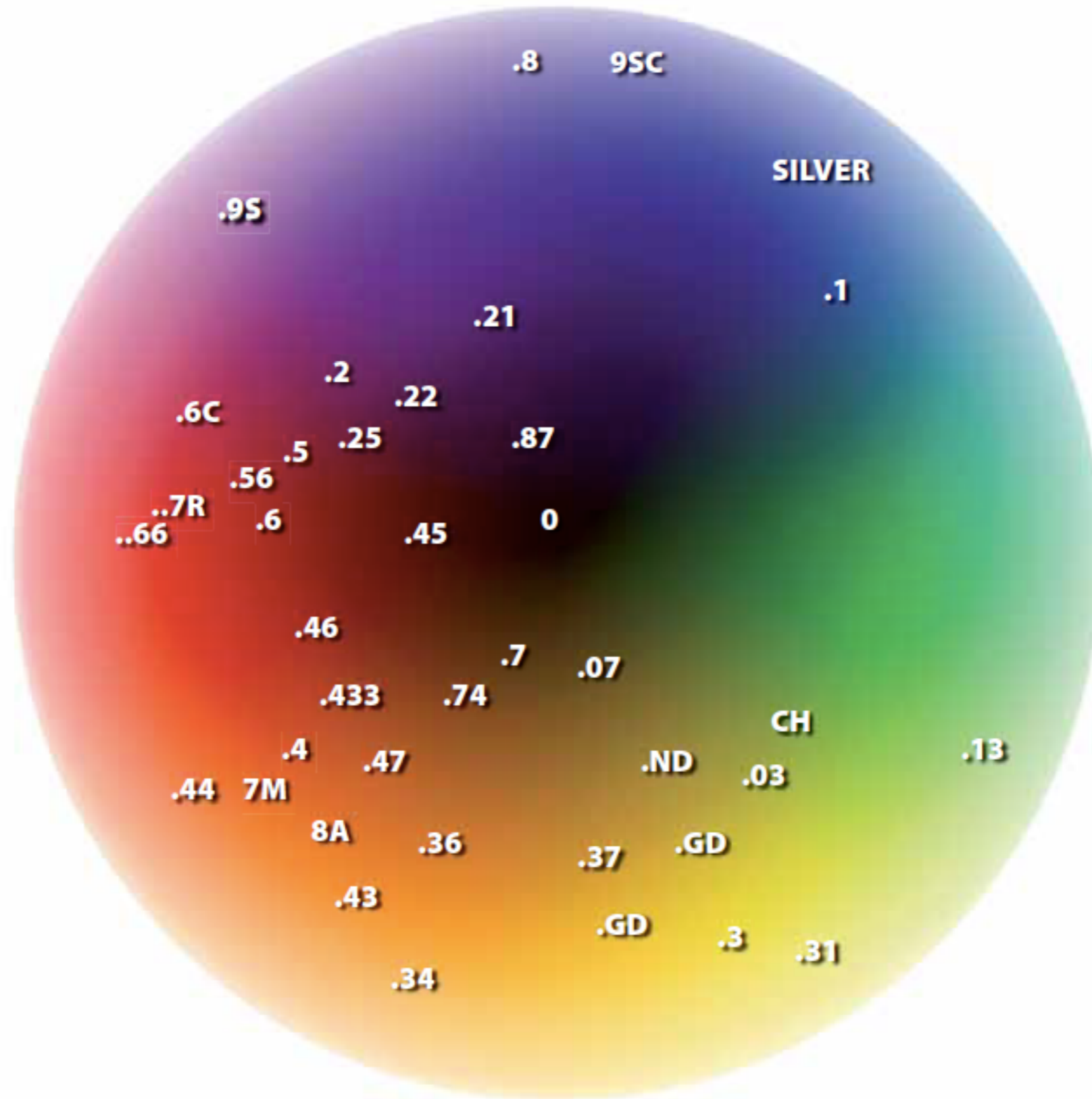
Tonality:

- .1 = Ash
- .2 = Purple Irisé
- .3 = Golden
- .4 = Copper
- .5 = Mahogany
- .6 = Red
- .7 = Brown/Green
- .8 = Pearl
- .9 = Blue



COLOUR WHEEL positioning

Positioning of the LEVEL and TONE(*)



DEEP

LIGHT

				NEUTRAL				COPPER ORANGE												RED			PURPLE RED							
4.18			1.9	1	2	4.17	3	4	4.87		4.03			4.74									4.5				4.65		4.22	
5.18	5.11	5.1			5.08	5.17	5.13	5	5.87	5.31	5.03	5.3	5.07	5.74		5.47	5.7				5.43		5.5	5.45	5.64	5.66	5.56	5.65	5.62	5.22
6.18		6.1	6.91		6.08	6.17	6.13	6	6.87	6.31	6.03	6.3	6.07	6.74	6.37	6.47			6.14		6.43	6.4	6.46		6.64	6.66	6.56 (6C)		6.62	6.22
7.18	7.11	7.1	7.91		7.08	7.17	7.13	7	7.87	7.31	7.03	7.3		7.74	7.37	7.47			7.14	7.433	7.43	7.4	7.44	7.46	7.45	7.64				7.62
		8.1	8.9	8.89	8.08	8.17	8.13	8		8.31	8.03	8.3		8.74	8.37			8.34	8.14	8.433		8.4	8.44							
		9.1	9.29 (9S)	9.89	9.08	9.17	9.13	9		9.31	9.03	9.3		9.74	9.37			9.34	9.14	9.433										
			10.9 (9SC)	10.89	10.08	10.17		10																		7R				
		11.1		11.89	11.8	10.1EC	11.0	10.5C			10.8EC	10.3EC									7M	7.43I	0.44			0.66		0.25		0.28
				NEUTRAL				COPPER ORANGE												RED			PURPLE RED							

Oxidizing Coloring



ABSOLUTE AND SUPERBLOND

PERMANENT COLORING

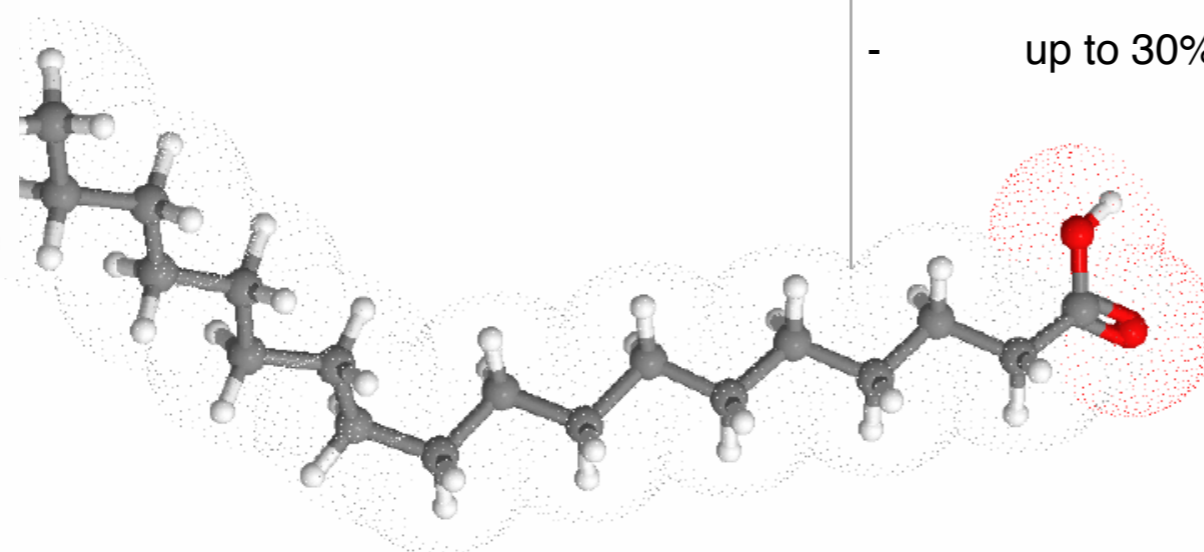
TECHNOLOGY

- **M.A.B.**
MONOETHANOLAMINE
AMMONIA
BASE

Technology that allows brightening, depositing and simultaneously adding highlights (*in traditional colors the 3 subsequent phases are not simultaneous*)

ADVANTAGES

- the three simultaneous phases for the entire processing time guarantee:
 - gradual lightening = more delicate action for the hair
 - increased deposit of pigment and greater duration of the color
 - greater color saturation and intensity of the highlight
- reduced ammonia content (<2% in Absolute; 3.5% in the Superblonds)
- reduced monoethanolamine content (2% in Absolute) that maintains the pH stable for the entire duration of processing for reduced wear on the hair
- maximum coverage of grey hair, 100% natural series and 80/100% highlighting series of ABSOLUTE
- up to 30% coverage of grey hair SUPERBLOND series
- greater color retention



Oxidizing Coloring - Permanent



<p>ABSOLUTE</p>	<p>MIX</p> <p>1+2</p>	<p>DEVELOPER</p> <p>5 10 20 30 40</p>	<p>30°</p> <p>15°</p>	<p>COWASH</p>	<p>COLOR PRO</p>	<p>CARE FOR COLOR - RETAIL</p>
<p>SUPERBLOND</p>	<p>MIX</p> <p>1+3</p>	<p>DEVELOPER</p> <p>30 40</p>	<p>45°</p> <p>30°</p>	<p>COWASH</p>	<p>COLOR PRO</p>	<p>CARE FOR COLOR - RETAIL</p>

	GREY HAIR	NATURAL HAIR	COLORED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
Absolute					
Superblond					



PBFC DEVELOPER

PBFC SUPERBLOND 1:3 / 45-55 MINUTES PROCESSING TIME

PBFC ABSOLUTE 1:2 / 30 MINUTES PROCESSING TIME

PBFC LUMINITY 1:2 / 30 MINUTES PROCESSING TIME (FROM 5 TO 15 MINUTES FOR TONER)

PBFC TONER 1:2 / 5 - 15 MINUTES PROCESSING TIME

PBFC BLONDE OMBRE' 1:2 / FROM 15 TO 30 MINUTES PROCESSING TIME

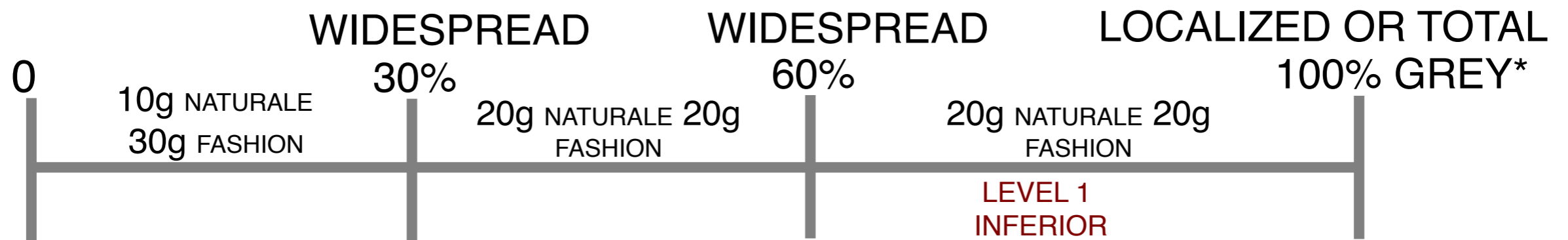


PBF DEVELOPERS	LEVELS OF LIGHTENING:			COVERING GREY	USE
	THICK	AVERAGE	FINE		
5 VOL. (1.5%)	0	→	0	Masking 30-50%	FOR TONING AND DARKENING IDEAL WITH TONER, LUMINITY AND BLONDE OMBRE'
10 VOL. (3%)	0	→	1	80-90%	FOR DARKENING
20 VOL. (6%)	1	→	2	100%	FOR PERFECT COVERING OF GREY HAIR AND TO LIGHTEN FROM 1 TO 2 LEVELS WITH ABSOLUTE
30 VOL. (9%)	2	→	3	80-90%	TO LIGHTEN 2-3 LEVELS
40 VOL. (12%)	3	→	4	50-60%	FOR SUPER LIGHTENING UP TO 4 LEVELS

TECHNIQUE FOR PERFECT COVERING OF GREY HAIR :



ABSOLUTE 1:2
30 MINUTES PROCESSING TIME

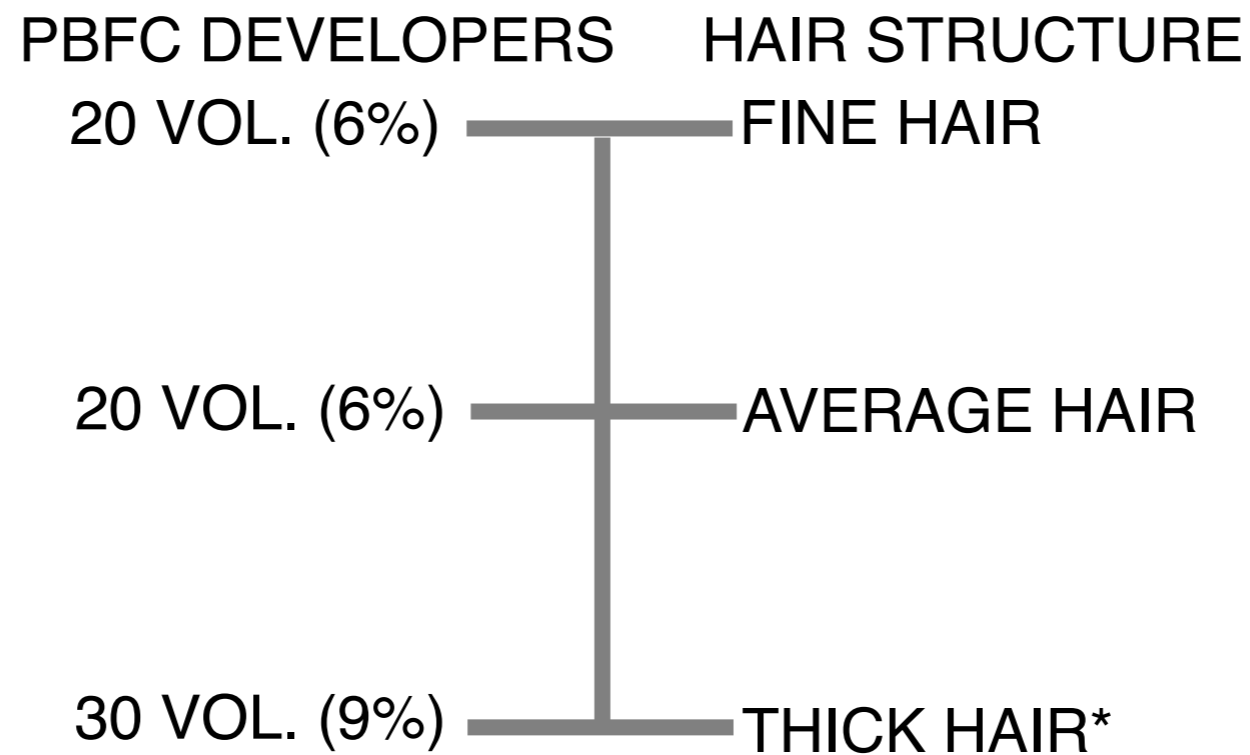


* IN THE CASE OF CIRCUMSCRIBED AND REDUCED AREAS OF GREY HAIR, PRE-PIGMENT THE INTERESTED AREAS WITH THE PURE COLOR OF A HIGHER LEVEL AND A WARMER HIGHLIGHT:
 EXAMPLE A) GOAL **6 NATURAL**: PRE-PIGMENTING WITH **7.3 PURE** AND THEN APPLY THE ADEQUATE MIXTURE.
 EXAMPLE A) GOAL **6.1 (COOL)**: PRE-PIGMENTING WITH **7 NATURAL** PURE AND THEN APPLY THE ADEQUATE MIXTURE.

TECHNIQUE FOR PERFECT COVERING OF GREY HAIR :



ABSOLUTE 1:2
30 MINUTES PROCESSING TIME

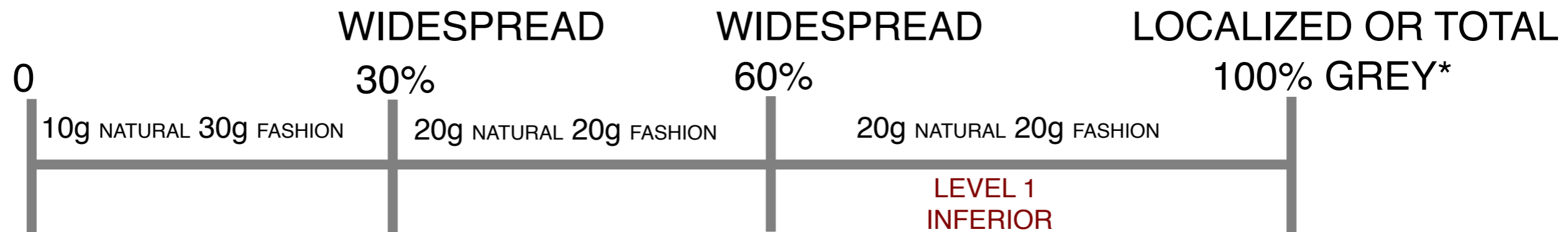


* IN CASE OF THICK GREY HAIR AND REFRACTORY HAIR, DECREASE THE AMOUNT OF DEVELOPER (10g LESS) AND RAISE THE VOLUMES FROM 20 TO 30, EXAMPLE:
40g OF MIXTURE ABSOLUTE + 70g DEVELOPER 30 VOL. (9%)

TECHNIQUE FOR PERFECT COVERING OF GREY HAIR :



- LUMINTY 1:2
- 30 MINUTES PROCESSING TIME
- 20 VOL.



* IN THE CASE OF CIRCUMSCRIBED AND REDUCED AREAS OF GREY HAIR, PRE-PIGMENT THE INTERESTED AREAS WITH THE PURE COLOR OF A HIGHER LEVEL AND A WARMER HIGHLIGHT:

EXAMPLE A) GOAL **6 NATURAL**: PRE-PIGMENTING WITH **7.3 PURE** AND THEN APPLY THE ADEQUATE MIXTURE.

EXAMPLE A) GOAL **6.1 (COOL)** PRE-PIGMENT WITH **7 NATURAL PURE** AND THEN APPLY THE ADEQUATE MIXTURE.

LUMINITY, TONER AND BLONDEOMBRE'



Tube 80ml

DEMI-PERMANENT COLORING
IN OXIDIZING **CREAM GEL**
AMMONIA-FREE, WITHOUT LIGHTENING*,
NO EFFECT OF ROOTS SHOWING*

LUMINITY
46 Nuances

TONER
9 Nuances

BLONDEOMBRE'
2 Nuances

BASE FORMULA CREAM GEL

DUAL SYSTEM METHOD

MIX 1:2

* IF USED AT 5 VOL.

Oxidizing Coloring - Demi-permanent



 LUMINITY	 MIX 1+2	 DEVELOPER 5 10 20	 15' - 30'	 COWASH	 COLOR PRO	 CARE FOR COLOR - RETAIL
 TONER	 MIX 1+2	 DEVELOPER 5 10	 5' - 15'	 COWASH	 COLOR PRO	 CARE FOR COLOR - RETAIL
 BLONDE OMBRÉ	 MIX 1+2	 DEVELOPER 5 10	 15' - 30'	 COWASH	 COLOR PRO	 CARE FOR COLOR - RETAIL

Luminosity



Blonde Ombré



Toner



	GREY HAIR	NATURAL HAIR	COLORED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
Luminosity	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>
Blonde Ombré	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>
Toner	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>

BLONDE SYSTEM



BLEACHING AND LIGHTENING SYSTEM WITH LOW VOLUMES FOR LIGHTENING IN TOTAL SAFETY

BLONDE 2 Lightening cream
to create fashion effects up to 2 levels and to correct color that is
too strong
tube 80 ml

BLONDE 4 Bleaching cream
On scalp bleach with oil protector for the scalp.
To delicately lighten the lengths and tips
and for hands' free work. DUST FREE
tube 180 ml

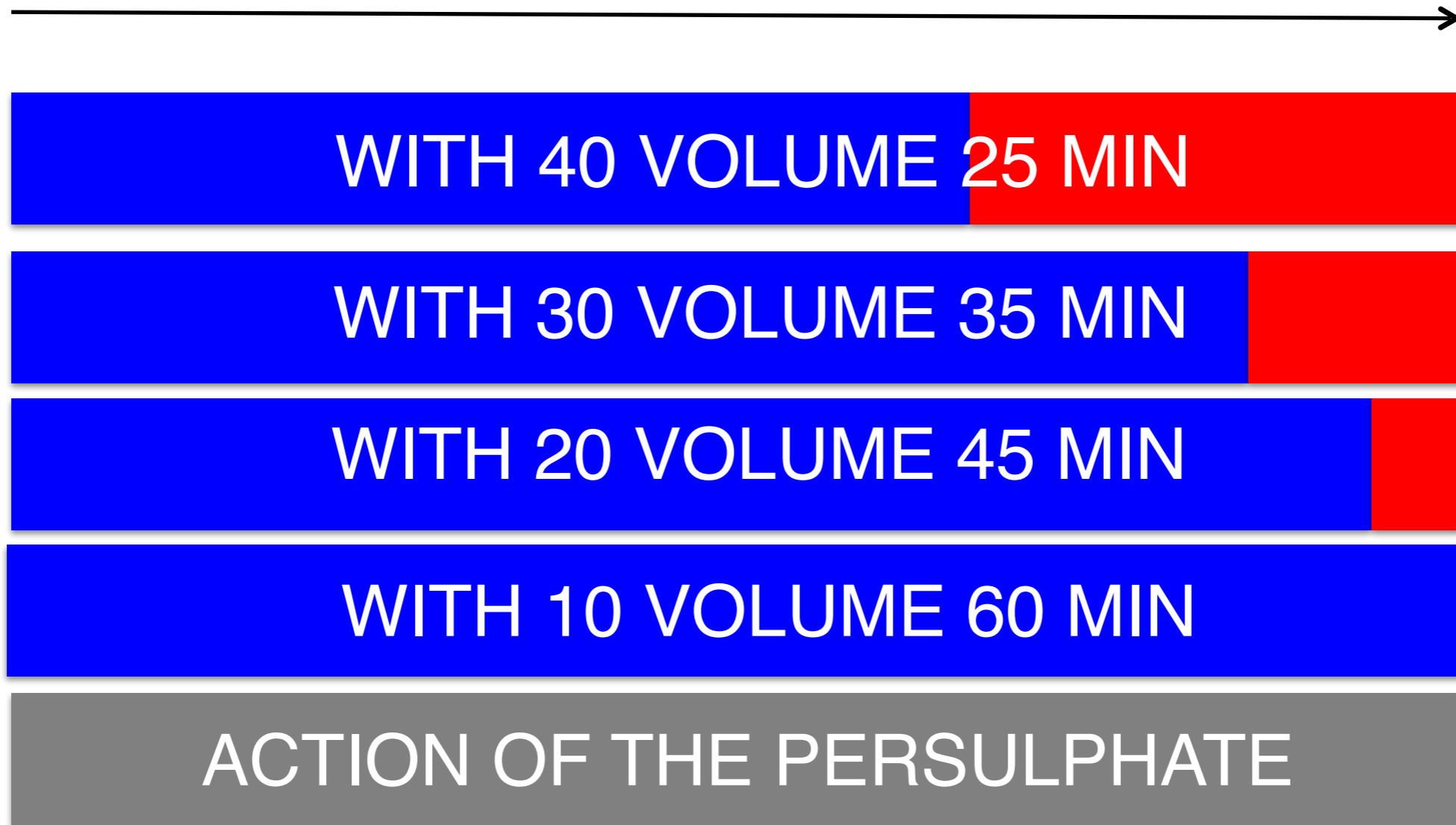
BLONDE 6 Bleaching powder
for maximum lightening even with low volumes
jar 500 g

BLONDE 7 Bleaching powder
for more intense and fast lightening
jar 500 g

LIGHT DESIGNER Lightening liquid
for lightening at the end of service on dry hair
2 200 ml bottles and an applicator

Reaction time with persulphate + alkali + peroxide

- LEVELS OF LIGHTENING +



NORMAL HAIR



DAMAGE HAIR

STRONG POROSITY

AVERAGE POROSITY

LOW POROSITY

STRONG POROSITY



AVERAGE POROSITY



LOW POROSITY



1:1

STRONG BLEACHING * NOT RECOMMENDED

1:1.5

AVERAGE STRONG BLEACHING * NOT RECOMMENDED in skin and foils

1:2

BLEACHING

PICKLING

1:3

LIGHT BLEACHING OR STRONG PICKLING

1:4

PICKLING

1:5

LIGHT PICKLING

K-PRO

IT IS IN ALL THE PRODUCTS

PBFC MOLECULAR



+ STRENGTH

TO THE HAIR



4

6

2

7

Bleaching



	GREY HAIR	NATURAL HAIR	COLOURED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
Blonde 2					
Blonde 4					
Blonde 6					
Blonde 7					

COLOR REMOVER CLEANING OF THE COSMETIC COLOR AND REBALANCING OF THE STRUCTURE.



SPECIFIC METHOD OF USE:

- ✓ MIX PRODUCT 1 AND 2 IN EQUAL DOSES
- ✓ APPLY ON DRY OR WASHED AND TOWEL-DRIED HAIR
- ✓ PROCESSING TIME FROM 5 TO 30 MINUTES ALSO UNDER A LIGHT HEAT SOURCE
- ✓ RINSE THOROUGHLY AND SHAMPOO TWICE
- ✓ APPLY WITH 50g OF 10 VOL. DEVELOPER + 10g OF ABSOLUTE 0
LEAVE IN FOR 3-5 MINUTES, THEN RINSE AND WASH
- ✓ IF YOU WANT TO RECOLOR TONE ON TONE USE MOLECULAR
WHICH GUARANTEES AN EXCELLENT RESULT
- ✓ IF YOU USE AN OXIDIZING COLOR, ALWAYS WORK WITH
1 TONE LIGHTER THAN THE GOAL COLOR, processing time generally halved



Color Remover



GREY HAIR	NATURAL HAIR	COLOURED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>
<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/>

USE ZERO PLUS MOLECULAR IN MIXTURE WITH ABSOLUTE, LUMINITY, TONER, BLONDEOMBRE' AND/OR BLONDE 2-4-6-7:



- ✓ 1g EVERY 10g OF COLORING CREAM
- ✓ AFTER YOU HAVE RINSED THE COLOR DO A *COWASH SHAMPOO*
- ✓ APPLY *HAIR MASK INFUSION* FOR 5 MINUTES AND RINSE
- ✓ USE *COLOR PRO INSTANT HAIR MASK* WITHOUT RINSING



ZERO PLUS

TRANSPARENT
CONCENTRATED HYPER
RESTRUCTURING OF
K-PRO



- ✓ 2g EVERY 10g OF POWDER OR CREAM OF THE BLONDE SERIES
- ✓ AFTER HAVING RINSED THE BLEACH USE THE SHAMPOO *SAVE MY BLONDE*
- ✓ APPLY *HAIR MASK INFUSION* FOR 5 MINUTES AND RINSE
- ✓ USE *COLOR PRO INSTANT HAIR MASK* WITHOUT RINSING

USE ZERO PLUS MOLECULAR TO REGENERATE DAMAGED AND FINE HAIR:



ZERO PLUS

TRANSPARENT
CONCENTRATED HYPER
RESTRUCTURING OF K-PRO



- ✓ WASH HAIR WITH THE APPROPRIATE SHAMPOO FROM THE "CAREFORCOLOR" LINE: *BROWN, BLONDE, RED, GREY&WHITE*
- ✓ APPLY *0 PLUS* ON ALL HAIR AND ALLOW IT TO REACT FOR 5 TO 25 MINUTES, THEN RINSE
- ✓ APPLY *HAIR MASK INFUSION* FOR 5/10 MINUTES AND RINSE
- ✓ APPLY *COLOR PRO INSTANT HAIR MASK* WITHOUT RINSING



ZERO PLUS

TRANSPARENT
CONCENTRATED HYPER
RESTRUCTURING OF
K-PRO



% of use

GREY HAIR	NATURAL HAIR	COLOURED HAIR	LIGHTENED HAIR SUPERBLOND	BLEACHED HAIR
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