# technical manual



conditioning permanent colour



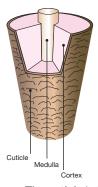
# milk shake creative

#### **WHAT IS COLOUR?**

Colour is the part of light that is reflected by a surface when it is lit up. Light contains all the available colour shades that, if mixed together, will create white.

Thanks to the presence of pigments, part of this light is absorbed by an objects' surface, while the reflected part allows us to see different colour shades.

Hairdressers, by using colours, are able to modify pigments in the hair and then modify its colour.



#### HAIR

Hair is the fundamental element when it comes to hair colour. Just as in art, where a different support gives a different result (canvas, paper, wall, etc...) in our field too, a different hair type will give a different final colour as a result. Two identical heads of hair do not exist in the world; according to this rule, we can say that one single formula does not exist for all customers.

Sound colour knowledge allows us to understand which results can be obtained by applying a colour on different hair types.

The hair's structure is made up of three distinct areas: the cuticle, the cortex, the medulla.

- The cuticle is the most external layer and it is made up of a lot of over-lapping scales that can open and close. Its function is to protect and its thickness varies from hair to hair, modifying hair resistance to different treatments. The cuticle is colourless.
- The cortex is the layer under the cuticle, it is made up of an array of fibres with different dimensions that wrap around themselves, creating the hair's structure. Inside this area, we can find the hair's natural colour.
- The hair medulla is the inner part of the hair, this area has no importance in the hair colouring process.

#### NATURAL HAIR COLOUR

Natural hair colour (MELANIN) is produced by melanocytes. It is composed of three pigment types:

EUMELANIN – mainly present in dark and cool colours
PHEOMELANIN – mainly present in light and warm colours
TRICHOSIDERIN – mainly present in medium and copper colours

The varied combination of these three melanin types and their concentration in the hair cortex give all the existing natural hair shades.

#### THE COLOUR PASSWORD - technical diagnosis

As mentioned above, the colour result changes according to the hair type it is applied to. In order to obtain the desired result and satisfy customer expectations, it is necessary to know some fundamental rules.

#### • FIVE ESSENTIAL POINTS

Before doing a colour service, it is always necessary to perform a technical diagnosis, considering the following points:

#### 1) DETERMINE THE HAIR COLOUR

It is necessary to determine the basic natural colour and the possible presence of a different colour on lengths and ends due to previous chemical services, such as lightening, perms, straightening treatments or natural lightening caused by the sun. This will affect the choice of shade and oxidising emulsion needed. The colour chart is the fundamental tool to have all the shades at hand and to assess your client's desired hair colour level and tone.

#### 2) DETERMINE GREY HAIR PERCENTAGE

Grey hair is not evenly distributed within the hair and therefore all areas of the head of hair should be checked to evaluate the percentage of greys present. Determining the percentage of grey hair will be essential for selecting the right colour to be used; the higher the percentage of grey hair, the greater the chance the colour will appear translucent.

#### 3) DETERMINE THE STRUCTURE TYPE OF HAIR

Different factors characterize hair structure:

- the thickness: it is important to determine the thickness of the hair because this affects the colour result. Hair can be thin, medium or coarse. During the coverage phase, thick hair tends to give a lighter colour result compared to thin hair, while if we use a colour to lighten hair, it will tend to stay darker and give warmer tones (yellow/orange) as a final result.
- the porosity: this is determined by an excessive and unnatural opening of the scales that compose the hair cuticle. This phenomenon creates an unbalanced absorption of pigments that compose the colour. The more porous hair is, the more it rejects warm pigments and therefore the colour result will be colder (ash or even green) compared to the desired result.
- the tenacity: this is hair's capacity to resist colour penetration. The excessive closure of the hair's cuticle scales creates a barrier that's hardly penetrable by the colour that, as a final result, will give less intense coverage and lightening effects.
- the elasticity: elasticity is the hair's ability to stretch and return to its original shape. If the hair stretches and returns to its original length when released, then it is in good condition. If the hair breaks or doesn't return to its former shape, the hair structure is compromised, and this makes it difficult for the right pigment development inside the hair, resulting in weak colour or poor colour stability and endurance.

• the density: this is the quantity of hair present on the scalp. This will determine the correct amount of product to use and how to apply it (the higher the density, the thinner the separations should be).

#### 4) DETERMINE THE DESIRED COLOUR

This evaluation must be made with the customer. Consulting the colour chart is essential to determine the level and tone of the desired colour result. Verify the possibility of reaching the desired result, taking into consideration all the necessary aspects regarding the hair.

#### 5) THE STRENGTH OF THE OXIDANT

There are 5 milk\_shake® creative permanent colour oxidants:

• milk\_shake<sup>o</sup> oxidizing emulsion 5 vol 1.5%

to darken / deposit, or tone pre-lightened hair, it is the most suitable oxidant when we want to give the highest pigment deposit in hair.

• milk\_shake oxidizing emulsion 10 vol 3%

the most suitable oxidant to give pigment deposit in hair. It allows to create some lightening, up to a maximum of one level.

• milk\_shake<sup>®</sup> oxidizing emulsion 20 vol 6%

the most suitable oxidant for grey hair coverage. It allows to create some lightening, from one to two levels.

• milk\_shake<sup>®</sup> oxidizing emulsion 30 vol 9%

the oxidant that allows to create lightening from two to three levels.

• milk shake oxidizing emulsion 40 vol 12%

the oxidant that allows to create lightening up to three levels. It is always to be used combined with the "high lift" series for lightening up to 4 levels.

milk\_shake® creative permanent colour is based on the essential principles of the colorimetry, which is a set of rules that guide the salon professional to creating the best colour results.

#### **COLORIMETRY RULES**

Colorimetry teaches us that three colours called "primary colours" create all colours. Primary colours can be divided into cold and warm tones, and by mixing these three colours, it is possible to create all shades.



# The darker primary colour.

It absorbs the most part of the light. Cold primary colour. It dominates red and yellow.



colour.

# RED

# The most brilliant primary colour. It absorbs as much light as it reflects it. Warm primary



### The lightest primary colour. It reflects the most part of the light. Warm primary colour.

#### THE MIXING OF TWO PRIMARY COLOURS CREATES A SECONDARY COLOUR.

#### EXAMPLE 1

by combining red with blue, we obtain purple.



#### EXAMPLE 2

by combining blue with yellow, we obtain green.

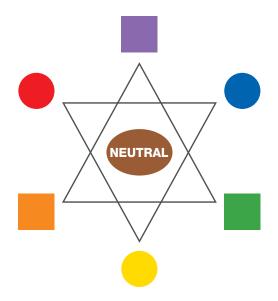


#### EXAMPLE 3

by combining yellow with red, we obtain orange.



#### **OSWALD STAR**



If two colours that are at the opposite corner points of the star are mixed together, we obtain a neutral or brown colour (natural colour).

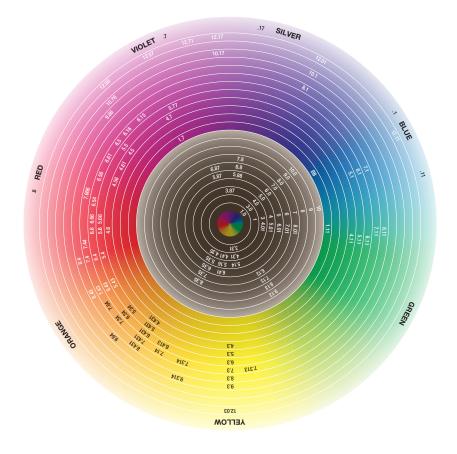
#### **PURPLE NEUTRALISES YELLOW**

#### **GREEN** NEUTRALISES **RED**

#### **BLUE NEUTRALISES ORANGE**

Neutralisation principles are very important, both during the basic colour formulation and in colour correction services. For example, if the applied colour resulted too warm (for example an excess of copper tone) we should add a colour with a blue base to neutralize the excess warm tones. When hair has an excess of cool tones (for example an excess of green colour) we will have to add warm tones (red) to obtain a neutral tone.

THE NEWTON DISC allows us to understand which kind of pigment is present in each milk\_shake® creative permanent colour shade in order to choose the right colour to obtain the desired result.



#### **TONAL SERIES**

#### • GREY HAIR COVERAGE

One of the main goals for customers when they want to colour their hair is to cover grey hair. In the **milk\_shake**° creative permanent colour range there are different tonal series for grey coverage.

**NATURALS** – a colour series developed to give natural and delicate grey coverage; the formulas have been calibrated to give a slight cool tone that counteracts warmer tones.

**MORE NATURALS** – the formulas have balanced primary colours, making the colours neutral, for clients who want colour with stronger grey coverage.

**COLD NATURALS** – 5 shades dedicated to hair that tends to have warm tones, in order to achieve a neutral/cool result, guaranteeing maximum coverage.

**CHOCOLATE** – is a series of browns expressed through unique chocolate shades that go from the intense browns of dark chocolate to lighter tones of milk chocolate.

**COFFEE** – is a series of browns with unique coffee shades. Perfect grey coverage with deep, full tones.

**BEIGE** – a blend of ash and golden tones that create balanced tones for colour that requires cool tones, maintaining the shine that is typical of golden shades; ideal for all blond levels.

**WOOD** – a series of neutral/cool browns. Hues that are reminiscent of the colours of wood. Browns with a violet chromatic scale to neutralise the tone during lightening and give cool iridescent tones during colour deposit.

#### LIMITLESS COMBINATIONS

**ASH** – with cooler blue or violet tones. These should be used to cool down unwanted warm tones, from golden to golden/copper.

**BLUE BLACK** – a deep black shade with blue pigments.

**MATTE –** with cool green or blue tones. These should be used to tone down excessive red/orange tones, to create an ash effect.

**PURE GOLD** – strong golden tones. These should be used to create results with intense golden tones, to neutralize unwanted cool tones.

**COPPER –** intense copper tones, for extremely radiant colour. Recommended for prepigmentation services or to control cool tones.

**MAHOGANY –** with delicate red-violet or red-copper tones. When added in small quantities to red or copper tones, these enhance their tone.

**RED** – with intense red tones, for vibrant, radiant colour.

**VIOLET** – with strong violet tones.

**EXOTIC** – a series of browns with a perfect balance of golden-copper tones, to create natural warm tones.

**SENSUAL WARMS** – a particular blend of cool and warm tones, creating rich, deep and vibrant tones.

**HIGHLIFTERS** – with a greater lightening strength compared to other series. Should be used on untreated hair starting from level 5 to lighter levels.

**SPECIALS** – these don't have a level, but rather a well-defined tone. This will influence the result during intensification or neutralisation of colour, without modifying the final level.

**CLEAR** – a neutral formula to be mixed with different shades to increase lightening, or to be used as a neutral lightener when mixed with developers.

**METALLIC** – these don't have a level but rather a well-defined tone defined by a dominant grey hue. Should always be applied to lightened hair.

#### **MIXING RATIO**

STANDARD PREPARATION: 1+1.5

In a non-metallic bowl, pour 1 part colouring cream milk\_shake creative permanent colour and add 1.5 parts milk\_shake oxidizing emulsion to 5 vol. 1.5%,10 vol. 3%, 20 vol. 6%, 30 vol. 9%, 40 vol. 12% (ex. 50 g of colouring cream + 75 g of oxidizing emulsion 20 vol. 6%).

• HIGH LIFTERS PREPARATION: 1+2

In a non-metallic bowl, pour 1 part colouring cream milk\_shake creative permanent colour and add 2 parts milk\_shake oxidizing emulsion to 40 vol. 12% (ex. 50 g of colouring cream "high lifter" + 100 g oxidizing emulsion 40 vol. 12%).

#### **PROCESSING TIME**

Processing time is determined by the oxidant type used in the dilution of the colour.

To darken / tone	oxidizing emulsion 5 vol. 1.5%	min. 20 min*
To darken / For max. 1 level of lift	oxidizing emulsion 10 vol. 3%	min. 30 min*
For 1 to 2 levels of lift	oxidizing emulsion 20 vol. 6%	min. 35 min*
For 2 to 3 levels of lift	oxidizing emulsion 30 vol. 9%	min. 40 min*
For 3 to 4 levels of lift	oxidizing emulsion 40 vol. 12%	min. 45 min*

 $\ensuremath{^{*}}\text{to}$  enhace the coverage and the intensity of shades process 5 min more.

**Note:** it is essential to respect processing time in order to obtain a correct colour and optimise its stability and long-term duration.

#### **TYPE OF SERVICE**

Colouring with shades of the same natural level or darker: apply the mixture of colour to the roots, lengths and ends, then process for 30 minutes. Colour lifting: apply the mixture 2 cm away from the roots to the ends, leaving it on for 20 minutes. Prepare the same mixture again and apply it on the hair regrowth; process it for another 30-45 minutes. For the application on the lengths and ends it is advised to use a higher volume oxidant than used on the roots, to achieve greater intensity and brilliance of colour.

**Colouring with the "high lifters" series:** apply the mixture 2 cm away from the roots to the ends and leave on for 20 minutes. Prepare the same mixture again and apply it on hair regrowth. Process it for 45-60 minutes.

**Colour touch-up:** apply the mixture only on the natural regrowth and process for 30-35 minutes. Then, to refresh the colour on the lengths and ends, choose and apply a **milk\_shake** direct colour shade or **milk\_shake** smoothies and process for 5-10 minutes. Alternatively, apply a **milk\_shake** the gloss colour shade and process for 20 minutes.

Colour touch-up with "high lifters" series: apply the mixture only on the natural regrowth and process it for 45-60 minutes. To refresh the colour on the lengths and ends, choose and apply a milk\_shake direct colour shade or milk\_shake smoothies and process for 5-10 minutes. Alternatively, apply a milk\_shake the gloss colour shade and process for 20 minutes.

#### **COLOUR CORRECTION**

Corrective colour application on very porous hair.

It is necessary to take into account the following principle:

the more porous hair is, the more it rejects the warm pigment and absorbs cold pigment. If you use any colour on hair with extremely porous lengths and ends, the hair will tend to become duller, and, in the case of high porosity, also darker. To avoid this undesired effect, it is necessary to create a different formula for lengths and ends, using a warmer colour.

To correct highlights on light levels from 7 to 11, it is recommended to use a golden and intense colour that will give sufficient warm tones. To correct highlights on medium levels from 4 to 6, it is recommended to add colours from the Golden Copper series to the formula.

#### WARM TONE CORRECTION DURING LIGHTENING

In lightening colour processes, it is recommended to use the Ash Series to help control unwanted warm or golden tones.

On thicker and coarser hair, the underlying pigment might appear too warm, it is recommended to add a cold Special to your Ash series colour formula.

#### **RE-PIGMENTATION**

There are two cases where it is recommended to do a re-pigmentation before applying a colour service:

- 1) if the colour did not last as long as it should have.
- 2) if you decide to darken more than two levels in previously lightened hair.

#### **RE-PIGMENTATION TABLE**

DESIRED COLOUR	RE-PIGMENTATION COLOUR	
from 1 to 4	5,4	
5	6,43	
6	7,43	
7	8,3	
8	9,3	

From the table select the most suitable **milk\_shake**° creative permanent colour shade to use and prepare it by mixing it with **milk\_shake**° **oxidizing emulsion 5 vol. or 10 vol.** and apply it on the areas we want to colour.

Process 20-25 minutes then rinse the colour and dry the hair.

In the case of extremely porous hair, do not rinse, towel dry the re-pigmentation formula on the hair.

Prepare the desired **milk\_shake**° creative permanent colour shade by mixing with **milk\_shake**° **oxidizing emulsion 10 vol.** and apply it onto the hair we want to colour.

**NOTE:** The shades indicated on the reference re-pigmentation table can change slightly, according to hair porosity. If the hair is weak or damaged, it is recommended to do a reconstruction service before the colour service.

#### **RINSING**

At the end of the processing time add a small amount of lukewarm water and massage the colour for about 2 minutes, then rinse out thoroughly. Apply <code>milk\_shake</code>° colour specifics acid colour sealer over the whole head of hair. Massage 3 minutes. Without rinsing apply <code>milk\_shake</code>° colour sealing shampoo, lather and rinse. Apply <code>milk\_shake</code>° colour sealing conditioner and massage through the hair for 2 minutes, then rinse and style as desired.



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