



What is N-PLEX?

N-PLEX made with A.B.S.™ (Anti-Breakage System™) technology, is an additive specially formulated by Hair Forensic Laboratories™ to work as a stand-alone treatment, and also work compatibly with all color and chemical procedures in order to build and repair the bonds in the hair, as well as prevent any damage before it even starts.

HOW do I use N-PLEX?

N-PLEX is an extraordinarily versatile 3-step system that is very simple to use. Steps 1&2 are for in-salon use, and Step 3 is for at-home maintenance.

- N-PLEX can be used with all colour systems (all brands).
- Uses Niosomes; a revolutionary proprietary complex of naturally derived active enzymes.
- No interference with bleaching products or hair colors.
- Does not modify the desired color result.

Why Use N-PLEX?

Using Niosomes, a revolutionary proprietary complex of naturally derived enzymes N-PLEX repairs and protects the hair with:

- No changes to service formula/recipe.
- No increased processing time.
- No change in developer/peroxide level.
- No interference with color penetrator.

What is N-PLEX?

Step 1 - The Creator - in salon use.

The creator is formulated with ingredients that provide added nourishment in order to improve hair condition and maintain hair hydration whilst allowing the hair structure to become more elastic during the lifting process.

The active ingredients strengthen and reconnect the existing disulfide bonds, improving the hairs strength and elasticity. (a filming agent provides a protective shield around the hair shaft)
20-30% of our complex are amino acids - 70-80% contain the Niosomes.

What it does:

- Enhances any chemical service (colour, bleach, balayage).

- Creates and repairs disulfide bonds in the hair.

Allows the service mixture to penetrate deeper into the cortex, leaving stronger and more vibrant.

Step 2 - The Sealer - in salon use.

The sealer contains our complex of amino acids:

Soy isoflavones - impart added nourishment, improving the hairs health.

- N-acetyl-L-cysteine - Bond creator and protector

- Phytoceramide - Rice derived, establishes a protective shield around the hair shaft.

This step in the N-Plex system is performed after all the other steps in the chosen service (colouring, bleaching, perming etc) have been completed.

Step 2 - The Sealer is responsible for sealing the bonds - the final step in bond repair and reconstruction.

What it does:

- Fuses newly formed bonds into the cortex

- Delivers added hydration and nourishment

- Smooths the cuticle layer to create a uniform surface

Gives strength and shine. Once this step is finalized, the cuticle is closed. Hair bonds are now properly secured into the hair structure, leaving the hair fully hydrated and in great condition.

What is N-PLEX?

Step 3 - The Nourisher - Retail Home use.

Step 3 - the Nourisher:

Contains active ingredients that mirror those in Step 2 - the Sealer, but balanced to offer perfect home maintenance - leaving the hair beautifully smooth.

Protects the hair structure from environmental stress, maintaining the overall function of Step 2 - Sealer.

Contains conditioning agents that deliver emollients to enhance the hair's natural suppleness, and enhance shine.

Contains our A.B.S complex of proteins, ensuring the rebuilt bonds stay intact!

How To Use

N-PLEX & COLOUR 10% Rule

1. Mix the Colour formula using the standard mixing ratio for the colour to peroxide.
2. Add N-PLEX step 1 - Creator, at 10% of the colour portion of the mix, NOT THE PEROXIDE.
3. Apply mixture, allow usual processing time, rinse well, shampoo, tone and rinse again.

N-PLEX & HIGH LIFT COLOUR/ CREAM BLEACH 15% Rule

1. Mix the Colour formula using the standard mixing ratio for the colour to peroxide.
2. Add N-PLEX step 1 - Creator, at 15% of the colour portion of the mix, NOT THE PEROXIDE.
3. Apply mixture, allow usual processing time, rinse well, shampoo, tone and rinse again.

N-Plex & LIGHTENERS 20% Rule

1. Mix the Colour formula using the standard mixing ratio for lightening powder to peroxide.
2. Add N-PLEX step 1 - Creator, at 20% of the bleach powder portion of the mix, NOT THE PEROXIDE.
3. Apply mixture, allow usual processing time, rinse well, shampoo, tone and rinse again.

N-PLEX & PERMS NO% Rule

1. Prepare, roll, process, neutralize hair, remove rods according to the recommended perm instructions. (complete the perming process)
2. Towel dry the hair well, being careful not to pull or stretch the hair.
3. Gently massage N-PLEX step 1 - Creator, evenly from root to end.
(30ml of N-Plex step 1 Creator, is usually sufficient for medium length hair) let the N-PLEX step 1 - Creator set for 10 minutes.
4. Without rinsing, apply enough N-PLEX step 2 - Sealer, to saturate the hair evenly. Allow to penetrate for a MINIMUM of 5 minutes. Rinse well and style as required.

N-PLEX & KERATIN NO% Rule

1. Prepare the hair according to the recommended keratin instructions.
 2. Add N-PLEX step 1 - Creator: 1/3oz (9ml) to the usual amount of keratin straightening cream.
 3. Apply mixture, process and iron, then rinse and/or was as directed by the keratin instructions.
 4. Gently towel dry the hair, apply N-PLEX step 2 - Sealer, as much as needed to work evenly through the hair.
- Allow to penetrate for a MINIMUM of 5 minutes. Rinse well, dry and style as required.

N-Plex as an IN SALON - STAND ALONE TREATMENT NO% Rule

1. Shampoo hair and towel dry.
 2. Blend 1/3oz (9ml) N-PLEX step 1 - Creator with 1/2oz (15ml) of N-Plex step 2 - Sealer applying from root to tip.
 3. Cover with a cap, and allow 15 minutes processing time.
(under a heat source for best results)
 4. Rinse well, towel dry the hair, then apply a second application of N-PLEX step 2 - Sealer, as much as needed to work evenly through the hair.
- Allow to penetrate for a MINIMUM of 2 to 3minutes. Rinse well, dry and style as required.

The Science Bit!

Hair Structure:

Hair is a protein filament that grows from follicles found in the dermis (skin). Hair is primarily composed of protein, notably keratin. 14% of the hair is cysteine.

Hair contains 16 different proteins, and 3 main bonds

Hydrogen: weakest, breaks in contact with most elements.

Salt (sodium): stronger than Hydrogen, but weaker than sulfur.

Disulfide: strongest bond and gives hair its structure and shape.

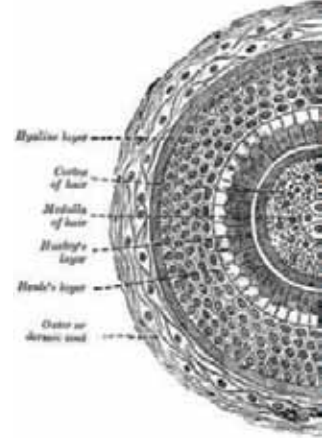
Hair fibres have a structure consisting of several layers.

From the outside in:

Cuticle: several layers of flat thin cells laid out overlapping one another.

Cortex: keratin bundles in cell structure which remain rod like.

Medulla: the open area at the fibres centre.



Ionization:

This is the process by which an atom or a molecule acquires a positive or negative charge by gaining or losing electrons in order to form ions - usually in conjunction with other chemical changes.

Ionization can result from:

the loss of an electron after collisions with sub atomic particles.

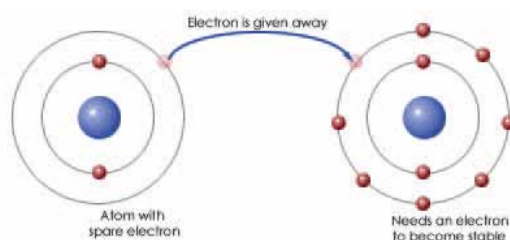
collisions with other atoms, molecules and ions.

interaction with light.

Atoms will gain or lose electrons depending on which action takes least energy. Ionic bonding is a chemical bond that arises from the mutual attraction of oppositely charged ions.

The most important thing:

all molecules want to balance their charge, and will do so as they have the opportunity.



The Science Bit!

The Niosome: Why N-Plex works

N-PLEX incorporates our revolutionary Anti Breakage System (A.B.S) complex of naturally derived actives, encapsulate in NIOSOMES.

This technological innovation ensures 100% penetration into the cortex.

(Niosomes are often used in medications and sunscreens. They work by creating 2 micro layers that ionize whatever is mixed with them.)

When used in hair colour, the micro layers coat the hair and pull the pigment in between the layers. Once the pigment is in, and it is ionized by the Niosomes, the proteins in the hair will squeeze the pigment through to stabilize the missing charge, getting the pigment into the cortex without having to break the bonds. (similar to the process of osmosis).



N-Plex and Chemical Services

N-PLEX can be used in partnership with any colour system, and any chemical service.

Although chemical services are different, there are a number of similarities with each:

Perms, straighteners, and relaxers break the bonds in the hair, and then allow them to re-form.

Most of these services will use either a strong alkali or acid thioglycolate to force the transformation.

N-PLEX is similar -we swell the hair internally, breaking the bonds, then reform with hydrogen.

After neutralization, the freshly bonded hydrogen is left in an excited state, and will break if disturbed.

Do not wash the hair for a few days after a perm.