PLIA
CURL

ADOR

A Double Original Reaction

PROCESS PROCESSES

01 Counseling

02 Pre-shampoo

03 Applying ADOR BASE

04 Winding the hair

05 Applying ADOR H1, F1, or HD1

06 Intermediate washing
*Be sure this process takes place on a shampoo basin.

07 Applying ADOR 1/2

08 Removing rods and rinsing only with warm water

09 Applying ADOR 2/2
*Perform this process on a shampoo basin

Dedicated pump foamer

10 Rinsing only with warm water and treating with conditioner

11 Finishing

Select
ADOR H1 (For stiff or normal hair),
ADOR F1 (For soft or damaged hair) or
ADOR HD1 (For highly damaged hair)

■Select a product according to hair type and degree of damage. (Refer to the product selection table.)

Notes to apply ADOR BASE

■Basically, apply the BASE to the hair before winding it.
■Apply evenly to the area to be curled.
Recommended use: Less than 1/3 of ADOR H1, F1, or HD1
*ADOR BASE is suitable for all types of hair, except for severely damaged hair. (Refer to the product selection table.)

Notes to select rods

■Select rods that match the hair design image.
(Using rods one size larger than usual is recommended.)

Notes during processing time

■Be sure to check the hair condition within five minutes.

Notes to perform intermediate washing

■Be sure to perform intermediate washing or the hair may not curl as desired.
■Do not use intermediate oxide conditioner because it could decrease the effect of ADOR 1/2.

Notes to apply ADOR 1/2

■Apply the same amount as ADOR 1st solution evenly. (For even application, apply back and forth and back again.)
■Be sure to apply twice [Reference time: 10 minutes + 5 minutes]
■Processing time: 15 minutes

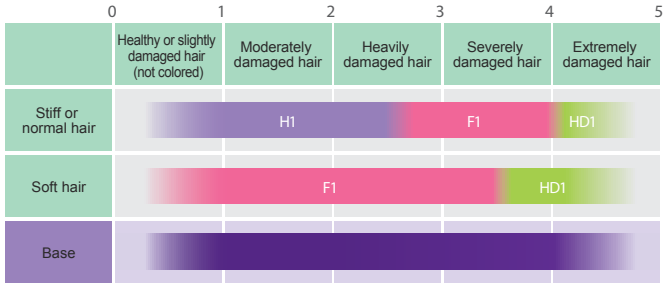
Notes to apply ADOR 2/2

■**First, thoroughly remove the moisture from the hair.**
■Apply the solution evenly to the area to be curled using the dedicated pump foamer, rub it into the hair for a few minutes, and then rinse off.

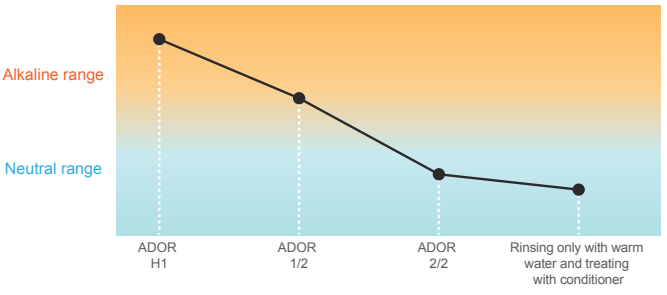
Recommended usage	Short hair	Medium hair	Long hair
	8 pushes	15 pushes	20 pushes

(Dedicated pump foamer) 1 push = Approximately 1 mL

Product Selection Table



The image of variation in the pH level of the hair



PLIA continues to evolve to support the work of the hair salon

Soft, elastic curls can withstand the weight of the hair!

That is because of the alkali bromine unique to ADOR!

ADOR can...

Form curls that can withstand the weight of the hair

Good for the roots and middle parts!

Keep the hair beautiful

Maintains beautiful hair!

Curl the hair as imagined using rods

Simple!

Forming uniform curls and fixing them from the inside of the hair

The secret to good curls and beautiful hair is the two-step fixation using alkali bromine.

Slow penetration of the inside of the hair with the second solution forms and fixes the curls and reduces any residual odor.

With the continually evolving ADOR from PLIA, experience simple curls as imagined that can withstand the weight of the hair!

MECHANISM

MECHANISM

*The illustrations shown below are concept images.

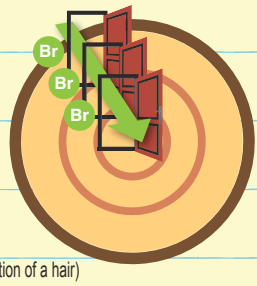
The second solution with alkali bromine helps to curl the hair beautifully from the inside!

Generally, bromine (sodium bromate), which is a curl-fixing component, is acidified (acid bromine) when used because the effect increases when the pH level is acidic. However, recent research indicates that acid bromine is not necessarily effective for fixing curls. Therefore, two-step fixation focusing on alkali bromine is now employed in ADOR products! This fixes the curls not only on the hair surface but also from the inside. This concept is a discovery based on the aqua replacement formulation (osmotic adjustment) of PLIA.

The secret is two-step slow fixation!

ADOR 1/2

1st step

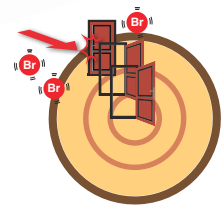


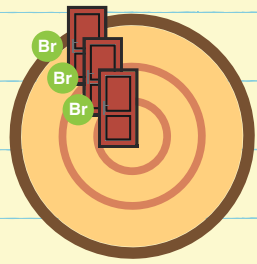
(Cross-section of a hair)

- Alkali bromine can penetrate through the hair because it acts on the hair slowly.

On the other hand, in the case of acid bromine...

Acid bromine acts instantly near the cuticles immediately after it is applied to the hair. As a result, it becomes difficult for acid bromine to penetrate into the inside of the hair.

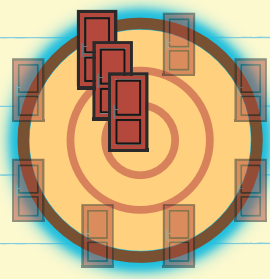




- Alkali bromine penetrates into the hair and acts to fix curls from the inside.
- At the same time, the odor from the curl formulation component is eliminated.

ADOR 2/2

2nd step



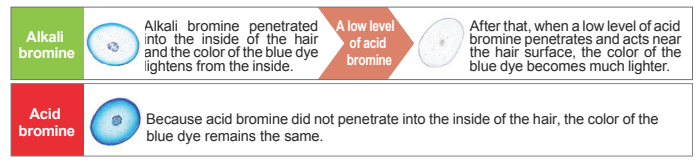
- To set the curls further as the last push, a low level of acid bromine sets and tightens the cuticles while returning the pH level of the hair to neutral.
- Persimmon tannin and mixed plant extract* further reduce the odor.

*Ginger root extract, *Rehmanniae radix* extract, *Paeonia albiflora* root extract, *Cnidium officinale* root extract, and *Angelica acutiloba* root extract

An experiment on the osmotic effect of bromine (sodium bromate) in the hair

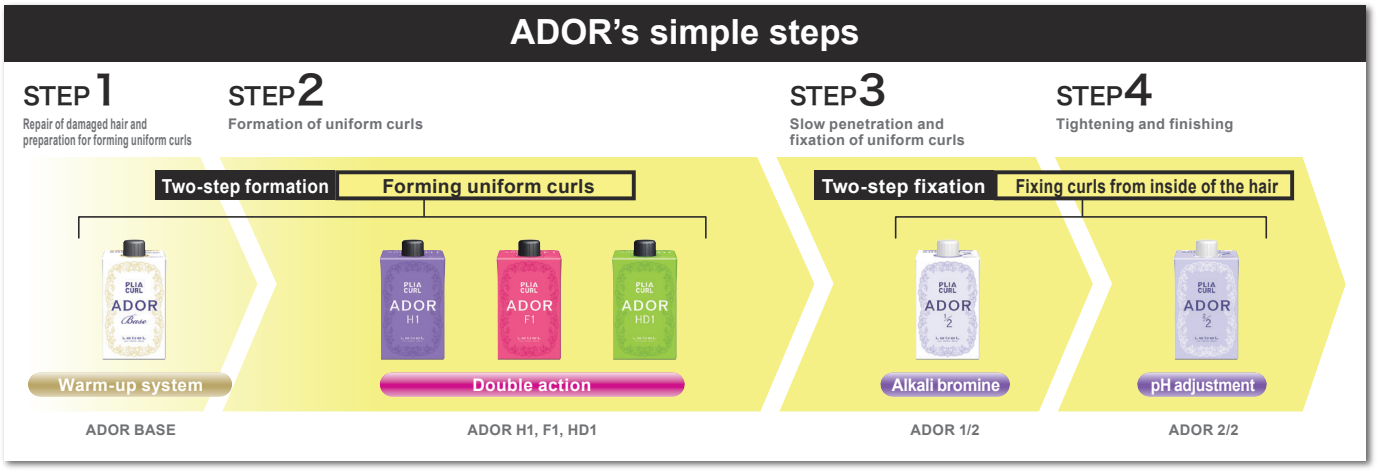
After penetrating blue dye into the human hair (white hair) treated with the first solution in advance, two kinds of solutions, alkali bromine and acid bromine, were penetrated into it, respectively. The result is as shown on the right:

*The color of the blue dye lightens when bromine penetrates and acts on the hair.

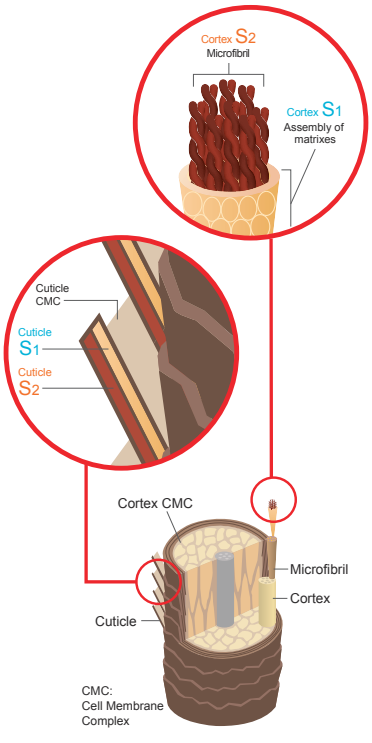


*The alkali components of ADOR 1/2 include sodium sesquicarbonate, a component that is mild to the hair because the pH level is high (alkaline) but the alkali level is low. Generally, the component is found in bath agents as an environmentally friendly natural cleaning ingredient.

ADOR's simple steps



S-S bond and double action involved in the formation of curls



SCMC Hydrophilic

This is the S-S bond in the hydrophilic region. It exists in the keratin protein of Cortex CMC and Cuticle CMC and acts as the path for the water and solution.

S1 Hydrophilic

This is the S-S bond in the hydrophilic region. This mainly joins the matrixes that tie the circumference of microfibrils cylindrically. In addition, it also exists in cuticles in the form of plates.

◀Cortex S1
◀Cuticle S1

S2 Hydrophobic

This is the S-S bond in the hydrophobic region. Generally, this has a spring-like structure and fixes the microfibrils related to elasticity. In addition, it also exists in cuticles in the form of plates.

◀Cortex S2
◀Cuticle S2

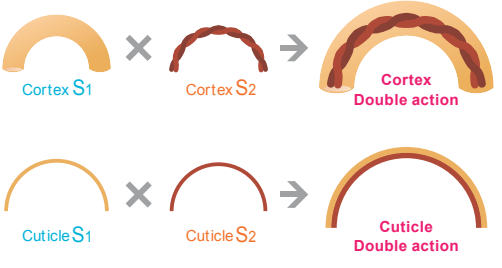
Warm-up system

Two-step formation

Double action (ADOR H1, F1, HD1)

The hydrophilic curl forming components (thioglycolic acid and cysteine) and hydrophobic curl forming components (cysteamine and thioglycerine) penetrate into the hair and act on S1 and S2, respectively. These components act on both S1 and S2 involved in the formation of curls to form stress-free, beautiful, elastic, and firm curls.

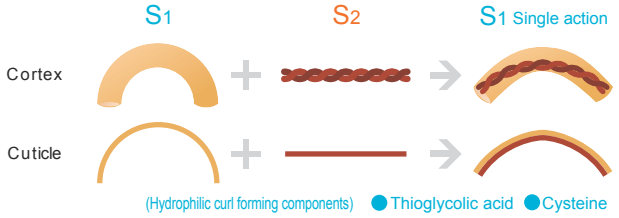
S1 × S2 = Double action



In the case of the single action…

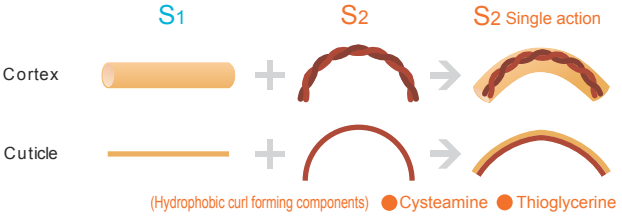
The single action by hydrophilic curl forming components

Since these components generally act only on S1, both bent S1 and straight S2 exist together. The force of S2 tries to return to the straight state and may loosen the curls, preventing elasticity and the natural movement of the hair.



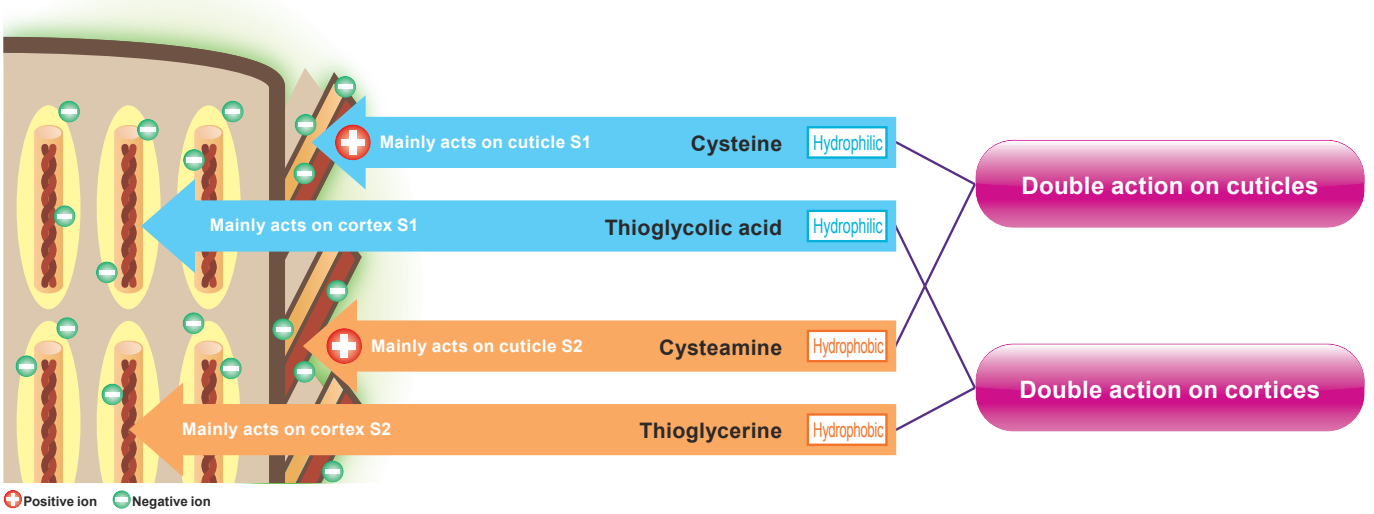
Single action by hydrophobic curl forming components

Since these components generally act only on S2, both straight S1 and bent S2 exist together. The force of S1 tries to return to the straight state and may weaken curl formation.



The secret of the first solution is a mixture of four components! Two types of double action based on ionicity.

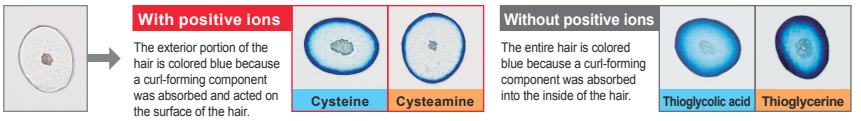
Some curl forming components have positive ions (amino group) but others do not.Cysteine and cysteamine have positive ions that act near the cuticles because they are absorbed by the hair surface, which are negatively charged when the first solution is applied. On the other hand, thioglycolic acid and thioglycerine do not have positive ions; they penetrate into the inside and act within the hair without being absorbed on the hair surface. Mixing four types of curl forming components based on ionicity in this way enables double action on both cuticles and cortices to form beautiful curls.



An experiment on the penetration of curl forming components

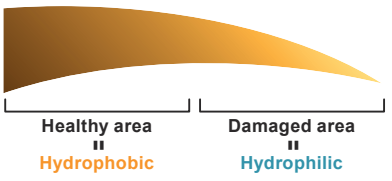
The result of staining human hair (white hair) with blue dye after four respective kinds of curl forming components act on the hair.

*The portion acted on by a curl-forming component is colored blue.

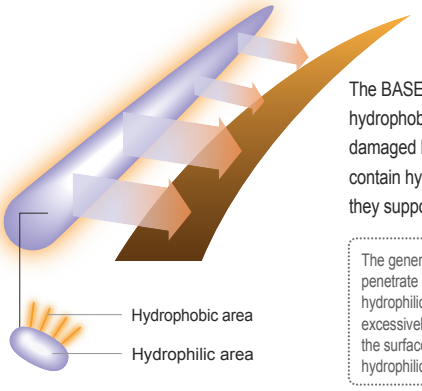


Supporting the formation of uniform curls using the BASE and first solution

■Condition of the hair

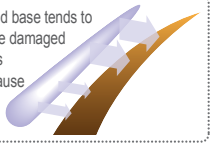


Hydrophobic sensor □ increases the ability to penetrate into healthy areas



The BASE and first solution soak into healthy hydrophobic areas and act mildly on the damaged hydrophilic areas because they contain hydrophobic sensor □.* 1 In this way, they support the formation of uniform curls.

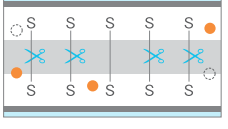
The general liquid base tends to penetrate into the damaged hydrophilic areas excessively because the surface is hydrophilic.



The warm-up system prevents non-uniform formation of curls.

The curl supporting components (thioglycolic acid and acetyl cysteine) in the base solution control the penetration of the first solution to support the formation of uniform curls by standing by SCMC. In addition, the hair repair components (moisture GG*2 and CMC cocktail*3) protect the damaged areas

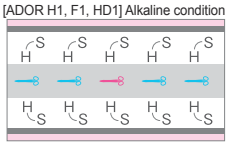
[ADOR BASE] Mildly acidic condition



■Standby

The hair repair components protect and repair the damaged areas, and the curl supporting components stand by S_{CMC}.

[ADOR H1, F1, HD1] Alkaline condition



■Initiation of action

When the first solution is applied, alkali in the solution simultaneously initiates the action of the curl supporting components, which are standing by. It controls the penetration of the first solution to form uniform curls.

◆Moisture GG is a component with a very strong moisturizing power. *Myrothamnus*, an African plant called the "resurrection tree," has a similar component, so it can bear plenty of green leaves after a rain even if it is dried during the dry season.

*1 PPG-10 methyl glucose *2 Glyceryl glucoside

*3 <Pseudo-ceramide> Phytosteryl/Octyldodecyl Lauroyl Glutamate, <Cholesterol derivative> Cholesterol (Sheep's wool), <Branched chain fatty acid derivative> Quaternium-33

LINE UP PLIA Series Product Lineup

For Curly (Cosmetic) and Wavy Hairs

PLIA CURL ADOR

PLIA CURL ADOR　Elastic and soft curls can withstand the weight of hair!

PLIA CURL ADOR BASE
400 mL/Approximately 25 mL/person/time
(Hair treatment agent)

PLIA CURL ADOR H1
400 mL/For 5 people
(Hair curling lotion)

PLIA CURL ADOR F1
400 mL/For 5 people
(Hair curling lotion)

PLIA CURL ADOR HD1
400 mL/For 5 people
(Hair curling lotion)

PLIA CURL ADOR 1/2
400 mL/For 5 people
(Hair curling lotion)

PLIA CURL ADOR 2/2
400 mL/Approximately 15 mL/person/time
(Hair curling lotion)

For Straight Hair

PLIA SWEEQUE　Cosmetic straight hair based on the idea of a soft, light, and moving hair design

PLIA SWEEQUE H1
400 g/For 5 people
<Cosmetic hair straightening agent/ Cosmetic product>

PLIA SWEEQUE 1
400 g/For 5 people
<Cosmetic hair straightening agent/ Cosmetic product>

PLIA SWEEQUE S1
400 g/For 5 people
<Cosmetic hair straightening agent/ Cosmetic product>

PLIA SWEEQUE 2
400 g/For 5 people
<Cosmetic hair straightening agent/ Cosmetic product>

PLIA THERMO CARE BASE
150 g
<Hair treatment agent>

＊PLIA THERMO PROTECT
<For highly damaged area>
150 g
<Hair treatment agent>

＊ Common to PLIA SWEEQUE

For proper use, read the precautionary statement carefully before use.

Lebel

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Lebel/www.lebel.co.jp
Takara Belmont Corporation

Toll free number
+81-120-00-2831 Hours of operation: 10:00–12:00/13:00–17:00 (excluding Saturdays, Sundays, and holidays)