



KerariceTM

Color and hair fiber protection
from sun radiation



Hair care

KERARICE™

Color and hair fiber protection from sun radiation

Sun exposure seriously damages hair:

The protective shield of the **fiber is weakened**

Internal structure **loses cohesion**

Color variation and **shine loss**

Diminishes softness, elasticity and resistance



The hair weakens, loses brightness and color



KERARICE™ is a plant active ingredient obtained from rice grain (*Oryza sativa L.*)

It is characterized by the presence of:

- **Phytic acid**, acts as antioxidant against damages caused by sun radiation
- **Amino acids**, with high substantivity for keratin, give strength to hair
- **Peptides** that:
 - Penetrate and repair from the inside
 - Cover the fiber and improves its sensorial properties
- **Polysaccharides** which avoid product build-up and an accumulative effect

KERARICE™

Avoids color fading in any hair type



COLOR PROTECTION

Improves tensile and sensorial hair properties



**REPARATION OF
INTERNAL STRUCTURE**

Protects hair keratin and lipids

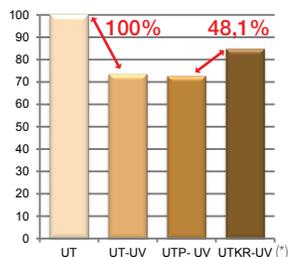


**RECOVERY OF SHINE
AND SOFTNESS**

Ex-vivo efficacy

• Protection of hair keratin

Tryptophan degradation



The more tryptophan the fiber has, the more protected and resistant to the aggressions is the hair

Recovery of 48.1% of tryptophan degraded by sun radiation

(*) Hair samples:

- UT: untreated hair
- UT-UV: irradiated untreated hair
- UTP-UV: irradiated untreated hair and treated with placebo
- UTKR-UV: irradiated untreated hair and treated with KERARICE™

KERARICE™ restores internal fiber cohesion and provides resistance against sun radiation

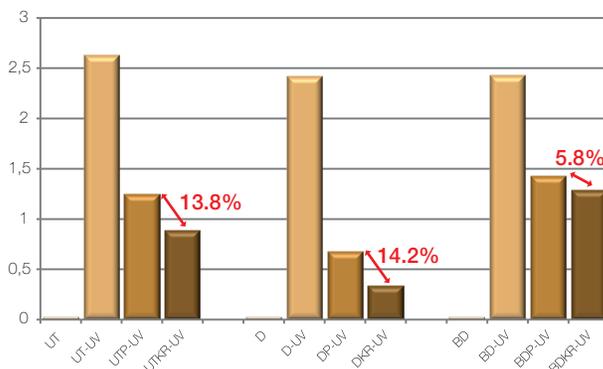
• Color protection

KERARICE™ decreases color fading in any hair type:

- Untreated (UT)
- Dyed (D)
- Bleached / dyed (BD)

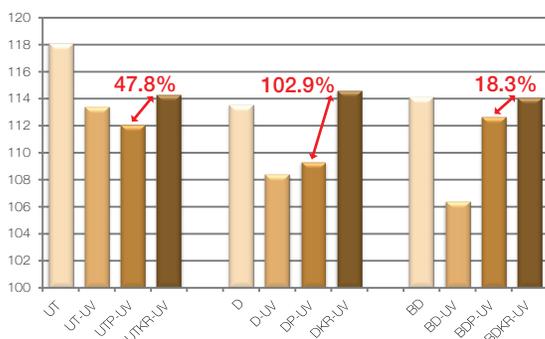
KERARICE™ enhances and protects the color of natural or dyed hair, against sun radiation damages

Color variation (ΔE)



• Shine

Shine at 85°



Recovers hair shine in any hair type: untreated (UT), dyed (D) or bleached / dyed (BD)

KERARICE™ protects the cuticle resulting in bright radiance

Complementary studies:

Increase of 29% in breaking energy = Stronger and more resistant hair

Decrease of 26% in protein degradation = Hair fiber repair

Decrease of 50% in the level of lipid peroxidation = Cuticle protection

Technical specifications

• Kerarice™ 73410

PROPERTIES	Protects hair from sun radiation. Restores structural and sensorial properties. Avoids color fading.
ACTIVE MOLECULES	Peptides and biofunctional amino acids, phytic acid and polysaccharides. Standardized in proteins and phytic acid
APPEARANCE	Transparent liquid Pale brown - brown color
SOLUBILITY	Soluble in aqueous solutions
RECOMMENDED DOSE	0.5 - 5 %

Cosmetic applications

- Specific lines for sun-exposed hair
- Products for color-treated hair care
- Intensive repairing products
- Specific products for a bright radiance
- Hair dyes

Formulation

• Ultra shine color saver serum

	INCI / PCPC	% (w/w)
A	Aqua (Water) KERARICE™ Propanediol	30.00 3.00 29.25
B	Isopropyl Myristate Cyclopentasiloxane Parfum (Fragrance) Sodium Acrylate/Acryloyldimethyl Taurate Copolymer, Isohexadecane, Polysorbate 80	10.00 25.00 0.30 1.75
C	Caprylyl Glycol, Caprylhydroxamic Acid, Glycerin	0.70