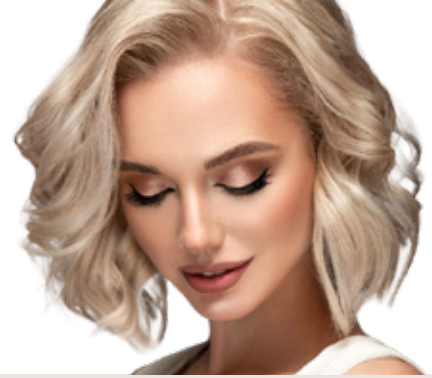


FIBER DTOX

ANTI-POLLUTION ACTIVE FOR HAIR

ASSESSA

INNOVATION FOR A GREENER WORLD



HAIR MIRROR OF THE ENVIRONMENT

The emission of particulate materials, organic molecules, heavy metals and other pollutants in the atmosphere cause serious health problems to living organisms. Water pollution also affects the biosphere and may represent a health risks. Even the treated water we use for bathing can still contain contaminants such as dissolved metals. Hair is considered one of the most efficient substrates for monitoring pollution by adsorbing, very efficiently, different chemicals, including heavy metals. When hair fibers are damaged, they become even more porous and reactive, increasing their ability to adsorb toxins and heavy metals. Recent research has shown that heavy metals such as copper, when in contact with oxidants such as hydrogen peroxide, catalyze the formation of aggressive free radicals (Fenton reaction) that damage the cuticle exposing the fiber to further damage. Thus, to ensure healthy hair, it is very important to adopt treatments that prevent or eliminate the accumulation of heavy metals and toxins caused by water and air pollution.



WHAT IS?

FIBER DTOX is an active ingredient designed to prevent the accumulation and to remove heavy metals and other toxins adsorbed on the surface of the hair. It is highly recommended before treatments that involve the use of hydrogen peroxide such as bleaching, light ening or perms.

WHEN HAIR HAS BEEN EXPOSED TO CHEMICAL ATTACKS ITS ABILITY TO ADSORPTING HEAVY METALS BECOMES

100

TIMES GREATER.

COPPER LEVELS FOUND IN SAMPLES HAIR

(IN CONTACT WITH TAP WATER CONTAINING 2 PPM OF COPPER)

HAIR	COPPER (PPM)
Virgin	20
Bleached	200



NATURAL
ORIGIN
96.55%

FIBER DTOX HEAVY METALS & FREE RADICALS

The highly reactive biomolecules present in FIBER DTOX capture and remove toxic heavy metals from hair fibers. FIBER DTOX film-forming properties also prevent pollutants from attaching to hair. FIBER DTOX is especially recommended for products to prevent accumulation of toxins on the hair and in treatments to remove accumulated metals in the hair fiber. It's also highly recommended before applying oxidants in hair treatments such as permanent and semipermanent dyes, bleaching / lightening or perms.

FIBER DTOX

ANTI-POLLUTION ACTIVE FOR HAIR

RESULTS

FIBER DTOX IN PRE-BLEACHING TREATMENT

Hair strands were moistened with a spray containing 3% FIBER DTOX and then bleached with hydrogen peroxide. After bleaching, the strands were evaluated for their tensile strength and elasticity and compared with a placebo treatment. The results show a 15% increase in strength and a 9% improvement in elasticity of the hair fibers treated with FIBER DTOX in relation to the placebo formulation, in addition to presenting a very significant opening of tones.

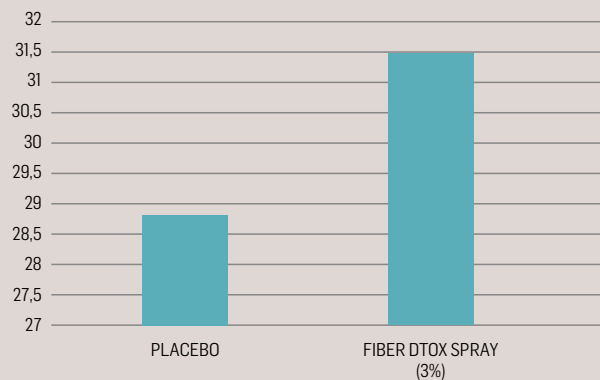


FIBER DTOX CAPTURES AND REMOVES TOXINS AND HEAVY METALS ADSORBED BY HAIR.

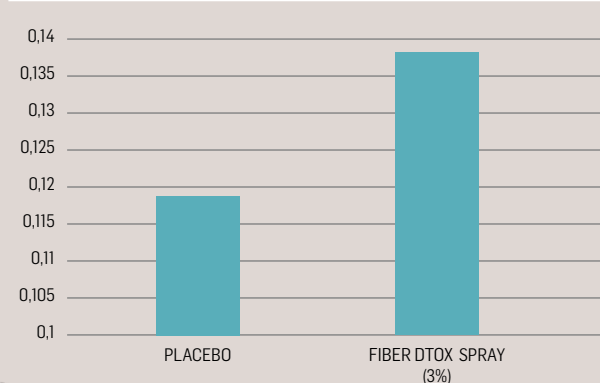
INCI NAME

Algin, Cucumis Sativus Fruit Extract, Citrus Limon Fruit Extract, Malus Domestica Fruit Extract, Disodium EDTA, Aqua, Sodium Benzoate and Potassium Sorbate.

ELASTICITY (mm)



STRENGTH (N)



PROOF OF CONCEPT

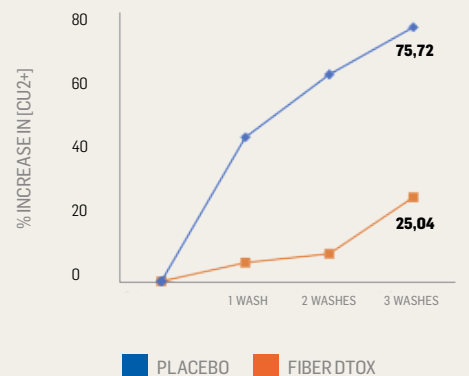
PREVENTION AND REDUCTION OF COOPER UPTAKE

Bleached hair strands were subjected to two different conditions, that simulate different hair care routines.

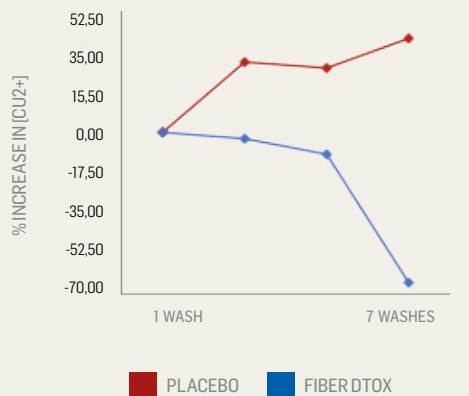
1 Prevention of copper uptake
Hair strands were pre-treated with an anti-pollution protective leave-on containing 3% FIBER DTOX

2 Prevention + reduction of copper levels
Hair strands were moistened with 30 ml of copper solution, followed by massaging with shampoo, conditioner and Gel Detox Mask containing 3% FIBER DTOX.

PREVENTION OF COPPER UPTAKE



COPPER REMOVAL



USAGE LEVELS

PRODUCT	%
DETOX GEL	2.0 TO 4.0
HAIR MASK	2.0 TO 3.0
SHAMPOO	1.0 TO 3.0
CONDITIONER	1.0 TO 3.0

