

# HAIR DANDRUFF REDUCER

## INCI NAME:

Propilene Glycol, Hexamidine Diisethionate, Water

## DOSE OF USE:

0,5 – 1,25 %

## SOLUBILITY:

Soluble in water (40-70 °C) and in ethanol. Not soluble at oils.

## COSMETIC USE:

- Anti-dandruff shampoos
- Hair care lotions
- Treatments for oily hair
- Anti-acne preparations
- Cosmetic preservative

## DESCRIPTION:

HAIR DANDRUFF REDUCER is a liquid, hydro-soluble preparation with demonstrated efficacy against *Pityrosporum ovale*.

Dandruff is a scalp disorder resulting in a disruption of the corneocytes cohesion which leads to an excessive shedding of dead cells on the scalp. The epidermal cell turn-over is accelerated and the cells are discarded in big clumps.

### Causes

There is a multifactor etiology of dandruff but it is generally accepted that the most common cause is probably the fungus *Malassezia furfur* (previously known as *Pityrosporum ovale*). A species of yeast found in superficial epidermal scales and hair follicles on oily skin, of borderline pathogenicity; may cause seborrheic dermatitis associated with immune deficiency.

As the fungus requires fat to grow, it is most common in areas with many sebaceous glands: on the scalp, face, and upper part of the body. When the fungus grows too rapidly, the natural renewal of cells is disturbed and dandruff appears with itching (a similar process may also occur with other fungi or bacteria).

Other factors can influence the state of dandruff such as:

- hormonal imbalances
- season (most severe during the winter),
- use of alkaline soaps,
- infrequent shampoo of hair or inadequate rinsing, excessive perspiration,
- stress, anxiety and tension...

## PROPERTIES:

HAIR DANDRUFF REDUCER is glycolic solution of Hexamidine diisethionate at 8%.

Hexamidine Diisethionate is a **proven antimicrobial agent** that has been used in a number of topical, ophthalmic and buccal preparations in Europe for many years. Clinical effectiveness and safety have been demonstrated in several clinical trials and with general wide usage in people of all ages (The Merck Index, 11th Ed.)

Hexamidine is well known and widely used for its **broad spectrum microbiostatic and microbicidal activity**, both immediate and residual, against gram positive and negative bacteria, anaerobes, fungi / yeast and protozoa viruses.

Hexamidine Diisethionate has a good cutaneous-mucous local tolerance and has an excellent coefficient of security (safe and effective) compared to other antiseptics. It remains active in the presence of sebum and acts as an anti-irritant for the skin. Its specific antimicrobial activity is not affected by the presence of abundant cutaneous secretions, especially in the cases of oily or acne-prone skin types.



## READY-TO-USE SOLUTION OF HEXAMIDINE DIISETHIONATE

Molecular formula  $C_{24} H_{38} N_4 O_{10} S_2$   
M: 606.72

Belonging to the class of aromatic  
diamidines

N a t u r a l l y                      E f f e c t i v e