

MOISTURISING AND ENERGIZING COMPLEX

Function and Characteristics:

HYDRERGY is obtained by fermentation of *Rhizobium meliloti* and of a microalgae from Hawaiian freshwater lakes.

Cosmetic interest (properties):

HYDRERGY contains:

- polyglucuronate, whose structure is analogous to hyaluronic acid: to soften and moisturise skin;
- vitamins B1, B2, B12, and Niacin, to stimulate ATP production, boost the energy level of the skin and protect it from various forms of stress.

Applications:

All moisturising day treatments and for stimulating skin's energy.

Recommended use level: 3 to 5%

CTFA / INCI name:

Water (Aqua) - Glycerin - Algae Extract - Polyglucuronic Acid

Specifications:

Appearance	: clear liquid
Colour	: yellow orange
Odour	: characteristic
pH	: 5.5 - 7.5
Specific gravity (20°C)	: 1.090 - 1.110
Refractive index (at 25°C)	: 1.375 - 1.395
Water content (K. Fischer)	: 55 - 65%
Polyglucuronate content	: 1.2 - 5 g/L
Bacteria	: < 100 germs/g
Yeast and moulds	: < 10 germs/g

Sederma patent: FR 2 768 335 - WO 99/13855

CLAIM SUBSTANTIATION

IN VITRO

Study of the stimulation of ATP synthesis by chemiluminescence:

- the ATP level increases with the concentration of HYDRERGY.

IN VIVO

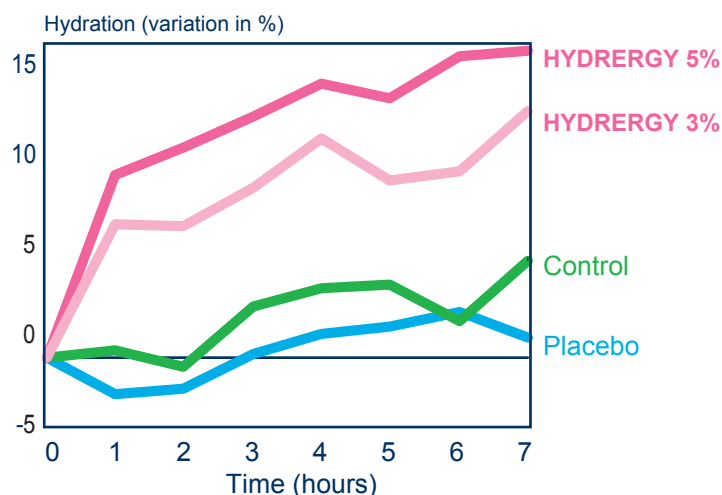
Study of cutaneous hydration with Corneometer:

11 volunteers / one application followed by 3 measurements every hour for 7 hours / gels containing 3% and 5% HYDRERGY compared to a placebo.

Study of cutaneous surface by scanning electron microscopy:

12 volunteers after a single application of a gel containing 5% HYDRERGY vs placebo on the forearm / DSquame® adhesif.

Increase of hydration with time



The area treated with the gel containing 5% HYDRERGY appears smooth and corneocytes are more regular.