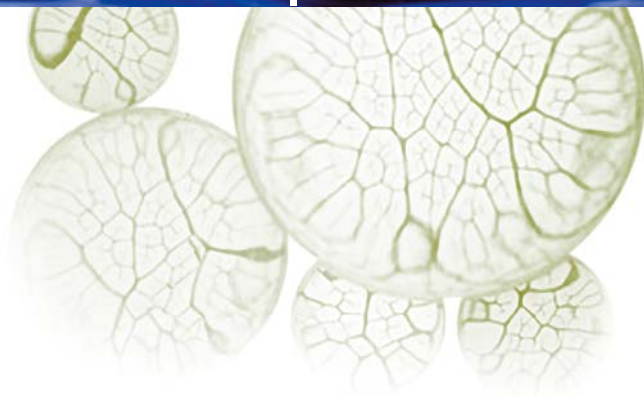
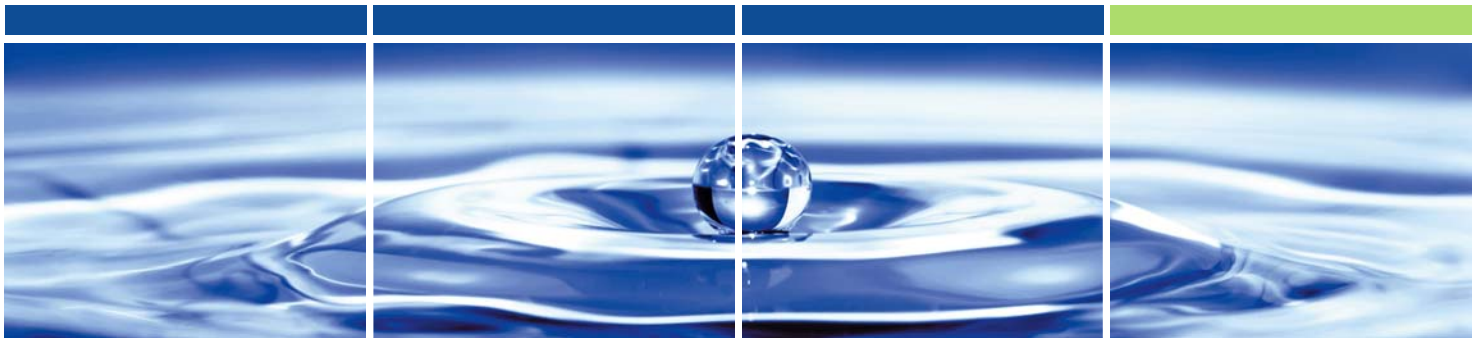




# HYDRACTIN®

Moisture & Energy



**RAHN** | Cosmetics

Your partner for excellence

# HYDRACTIN®

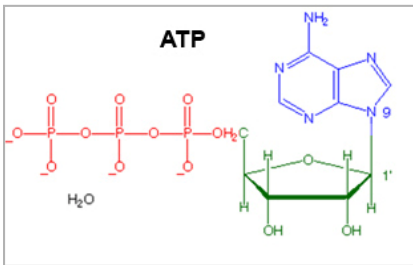
HYDRACTIN® optimises the water balance of the epidermis. The natural energy building block ATP stimulates the cell metabolism of the skin. It is essential for maintaining the osmotic equilibrium in the epidermis and this actively regulates its water balance. Algin, a water-retentive gel derived from sea algae, forms a hydrofilm on the skin and reduces the transepidermal water loss. The enzyme papain from the tropical fruit papaya removes old skin cells and promotes skin regeneration. HYDRACTIN® thus ensures a fresher appearance and boosts moisture and natural energy.



## Confirmed effectiveness

- Immediate improvement in skin moisture of up to + 38% after 1 hour – *in-vivo* study
- Long-term improvement in skin moisture of up to + 14% after 28 days – *in-vivo* study

## Active ingredients

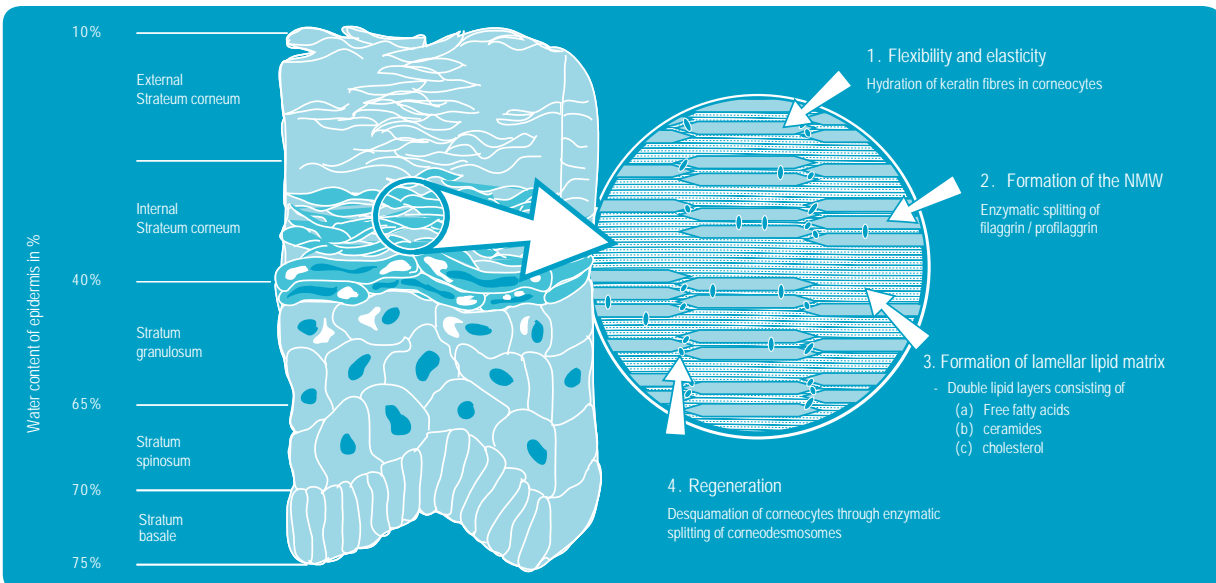


The vitalising cell factor **ATP** stimulates the metabolism of the skin. ATP is essential for maintaining the osmotic equilibrium of the epidermis and thus actively intervenes in the regulation of the water balance of the epidermis.

**Algin**, a natural water store derived from sea algae, forms a film of moisture on the surface of the skin. Through its water-retaining and film-forming properties it protects the skin against evaporation.

**Papaya extract** with the enzyme papain gives the skin a more youthful appearance. Through its protein splitting effect, the enzyme papain helps to remove dead flakes of skin. Metabolic processes and the growth of new skin cells are activated.

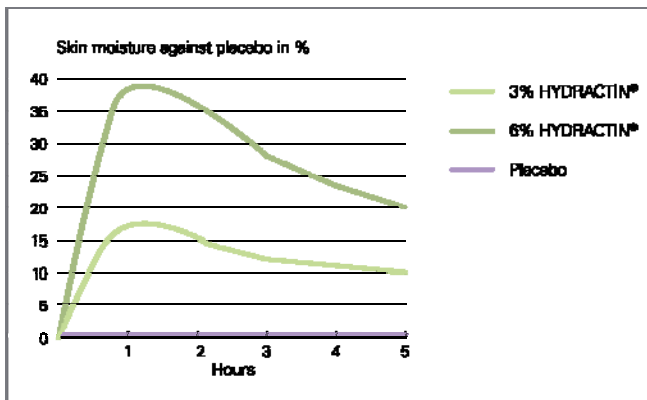
## Significance of water in the epidermis



## Efficacy studies

### Skin moisture – *in-vivo* short-term study

Test formulations with HYDRACTIN® versus placebo



**Measurement parameter:** Hydration of the stratum corneum

**Method:** Single treatment with 3% or 6% HYDRACTIN®, 16 test subjects, placebo: 0% HYDRACTIN®, age 48; measuring device: Corneometer®

**Result:** Effective skin moisturisation, increase of up to 38% compared with placebo; lasting effect: still 20% more skin moisture after 5 hours.

### Concentration for use

2-8%

### Areas of application

Moisturising skin care for face and body. Suitable for emulsions (W/O and O/W) and gels.

### INCI

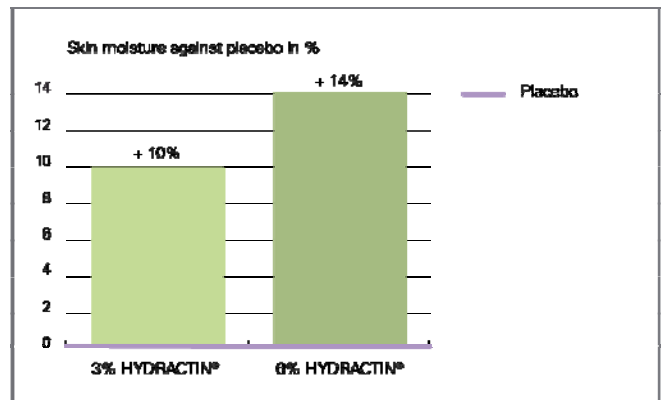
**EU:** Glycerin, Aqua, Disodium Adenosine Triphosphate, Carica Papaya Fruit Extract, Algin

**USA:** Glycerin, Water, Disodium Adenosine Triphosphate, Carica Papaya Fruit Extract, Algin

**Japan:** Glycerin, Water, Disodium Adenosine Triphosphate, Carica Papaya Fruit Extract, Algin

### Skin moisture – *in-vivo* long-term study

Test formulations with HYDRACTIN® versus placebo



**Measurement parameter:** Hydration of the stratum corneum

**Method:** 28 days 1 x daily treatment with 3% or 6% HYDRACTIN®, 16 test subjects, placebo: 0% HYDRACTIN®, age 48; measuring device: Corneometer®

**Result:** Long-term effect as moisturiser confirmed. Increase in skin moisture of up to 14% after 28 days.

### Further information

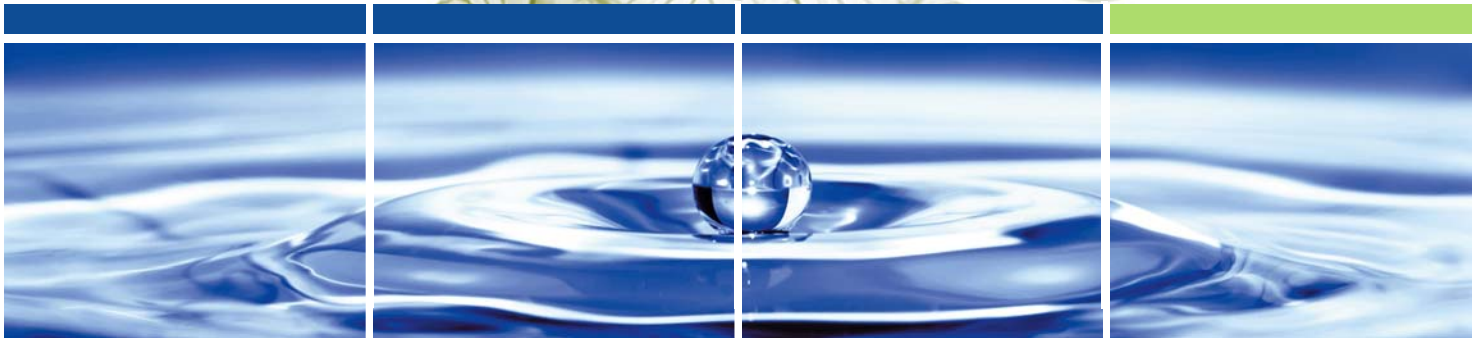
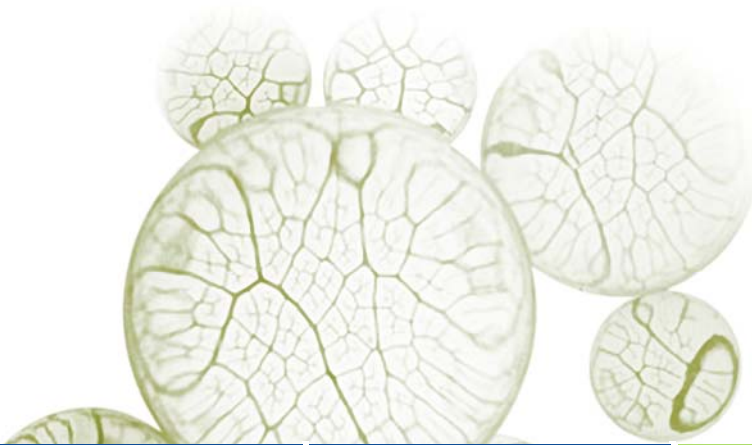
**Preservatives:** 0.5% phenoxyethanol

**Animal experiments:** Not tested on animals, no ingredients of animal origin

**Toxicology:** Non-toxic for humans and the environment

**Safety:** Free from GMOs, BSE, CMR, pesticides, mineral oils, heavy metals





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