**HydraGlobal Desert rose, relaunching the original global hydration**

Because the skin hydration process should be complete to be the most efficient, it is necessary to control it in a global way. To get a skin better moisturized, more supple, softer and looking younger.

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**How it works**

HydraGlobal Desert rose acts on three levels to relaunch skin original hydration. First at epidermis level, it reinforces cell regeneration that induces the water system and by helping water retention. Then, at the dermis level, it improves the synthesis of glycosaminoglycans, responsible for the content of hyaluronic acid and for the transfer of water from dermis to epidermis. At last, it decreases the production of free radicals, that create many cell dysfunctions, including dehydration.

Thanks to those actions, skin can better fight drying, one of ageing factors especially visible.

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**A story - the desert rose, the succulente from the Indian ocean**

*Adenium obesum, Apocynaceae*

As a tropical plant coming from the arabic peninsula (the harbour of Aden gives it its name) and the East of Africa, the desert rose is a plant with a caudex, and that wonderfully blooms, well appreciated by plant collectionneurs. It has been lately discovered in the 18th century in Middle East by a Swedish botanist; today it is cultivated in many tropical areas. It is a plant that can be till 3 m high in its original habitat, warm and dry zones. The inhabitants of the Socotra island, a volcanic island out of time au large du Yémen, think it has medicinal properties still to be studied.

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**Marketing claims - hydrating & anti-aging**

Moisturizing on a short and long term, helps to rebuild the hydrolipidic film, to get a better cohesion of the epidermis, limits skin drying, helps to get a soft and supple skin, regenerating, helps to rebuild the skin barrier, against free radicals, anti-oxidative, anti-ageing.

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To be used in skincare and make-up products like

- cream, fluid, serum, balm, gel, foundation, concealer, etc.
- any skincare or color cosmetic product dedicated to moisturize skin.
• **Efficacy - *in vitro* testing results**

Stimulation and regeneration of the epidermis - KI67 and filaggrin: at 0.5%, 1% and 2.5%
- stimulation of the proliferation of keratinocytes in the basal layer for treated epidermis respectively by 11%, 17% and 23%
- decrease of the epidermis differentiation that is translated by a decrease of the labelling of filaggrin

Anti-aging effect: at 0.5%, 1% and 2.5%
- significant stimulation of the neosynthesis of global glycosaminoglycans of human fibroblasts in culture, respectively by 16%, 27% and 35%

Moisturizing effect: at 0.5%
- increase of water retention in the dehydrated epidermis by 24% at T0+15 min, and by 35% at T0+30 min
- decrease of the trans-epidermic transfer of the \[^{3}H\]-H\(_2\)O by 27% at T0+15min, 24% at T0+30 min and by 21% at T0+60 min

Anti-oxidant effect: at 0.5%, 1% and 2.5%
- decrease of the physiological lipoperoxidation which was translated by a decrease of the MDA rate by 14%, 19% and 26%
- decrease of the lipoperoxidation induced by UVB (150 mJ/cm\(^2\)), which was translated by a decrease of the MDA rate by 24%, 31% and 36%, compared with protective enzymes SOD/catalase (-37%)

• **Technical information - formulating HydraGlobal Desert rose**
- INCI name of cells: adenium obesum leaf cell extract
- form: cells (20%) in dispersion in vegetal glycerine (80%)
- aspect: liquid
- concentration recommended starting at 0.5%
- dispersible in any formulation