



*Imperata Cylindrica*

**Function:**  
Creates water supplies.  
Moisturises the epidermis for 24 hours.

**Definition:**  
Hydroglycolic extract of  
*Imperata cylindrica* root.

**Characteristics:**  
*Imperata cylindrica*  
is rich in potassium and  
3-dimethylsulfopropionate (DMSP).

**Particular sign:**  
*Imperata cylindrica* can survive  
in desert and salt medium.

**Origin:**  
Asia and Australia

**INCI name:**  
Imperata Cylindrica Root Extract –  
Aqua (Water) – Glycerin –  
PEG 8 – Carbomer

**Applications:**  
Dehydrated skin (face and body),  
make-up foundation,  
dry scalp treatments.

**Formulation:**  
Water-soluble.  
Incorporate at the end of the emulsion  
between 40-45°C  
with stirring.

**Recommended use level:**  
3%

**Patent:**

FR 2 805 161 – WO 2001/062218

## 24-hour long-lasting moisturiser



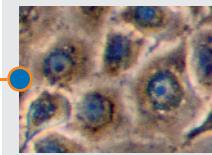
+ 20% hydration



*In vitro* tests: importance of potassium

## ● Human keratinocytes

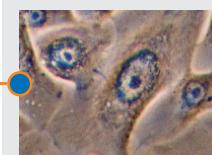
in a potassium-deficient medium.



Reduced cell cytoplasm

## ● Human keratinocytes

in a potassium-optimum medium



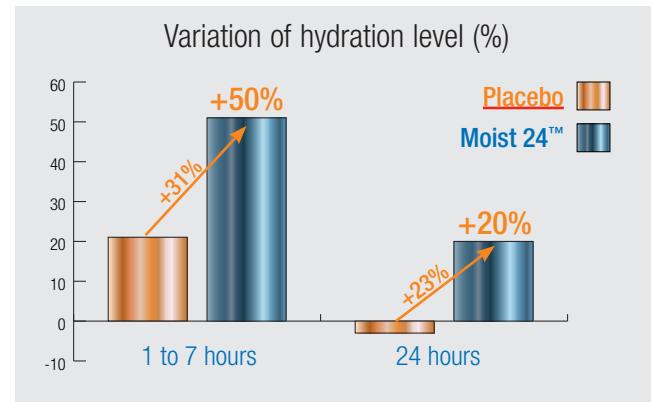
Bigger cell cytoplasm

## Clinical test: moisturising effect

12 volunteers.

2 applications a day of a gel containing 3% MOIST 24™ versus placebo; treated area: leg.

Measurement of hydration by corneometry every hour until 7 hours, then at 24 hours. A shower is included in the treatment time.



After 24 hours, +20% hydration versus control.

## Formulation

## Long-Lasting Moisturising Cream with Moist 24™

Tested formulation ref: SED0001050H

Part A.....	%
Ultrez 10 (Carbomer, B F Goodrich)	0.10
Water deionised	qsp 100
Part B.....	%
Glycerin	10.00
Preservatives	qs
Part C.....	%
Potassium sorbate	0.10
Part D.....	%
Stearic acid	0.50
Tween 20 (Polysorbate 20, Croda)	2.00
Crodacol CS90 (Cetearyl Alcohol, Croda)	1.60
Crodamol OP (Octyl Palmitate, Croda)	6.00
Part E.....	%
Pemulen TR2 (C 10-30 Alkyl Acrylate Crosspolymer, B F Goodrich)	0.20
DC345 (Cyclopentasiloxane & Cyclopentasiloxane, Dow Corning)	3.00

Part F .....	%
Water deionised	4.00
Sodium hydroxide 30%	0.40
Part G.....	%
MOIST 24™ (Sederma)	3.00

## Protocol:

Disperse Ultrez 10 into water and let swell for 15 minutes (part A). Mix part B and add it to part A. Add part C to parts (A+B). Mix part D and heat to 75°C in water-bath. Heat also parts (A+B+C). Pour part D into parts (A+B+C) with stirring and add part E extemporaneously. Neutralise with part F. Add part G at about 40°C. Homogenise.

**Non-guarantee:** This formulation has been subjected to limited stability tests and has been shown to perform well. However formulators adopting this approach should ensure to their own satisfaction long term stability and functionality. It is good practice to conduct safety tests on all final formulations prior to marketing. Suggested uses should not be taken as an inducement to infringe any existing patents.