

# MEADOWLACTONE®

MEADOWLACTONE® is an amphoteric compound that can isomerize into water-soluble and oil-soluble forms as a function of pH. The molecular configuration of MEADOWLACTONE® accounts for its ability to actively participate in tissue rehydration and conditioning.

INCI Name: Meadowfoam Delta-Lactone

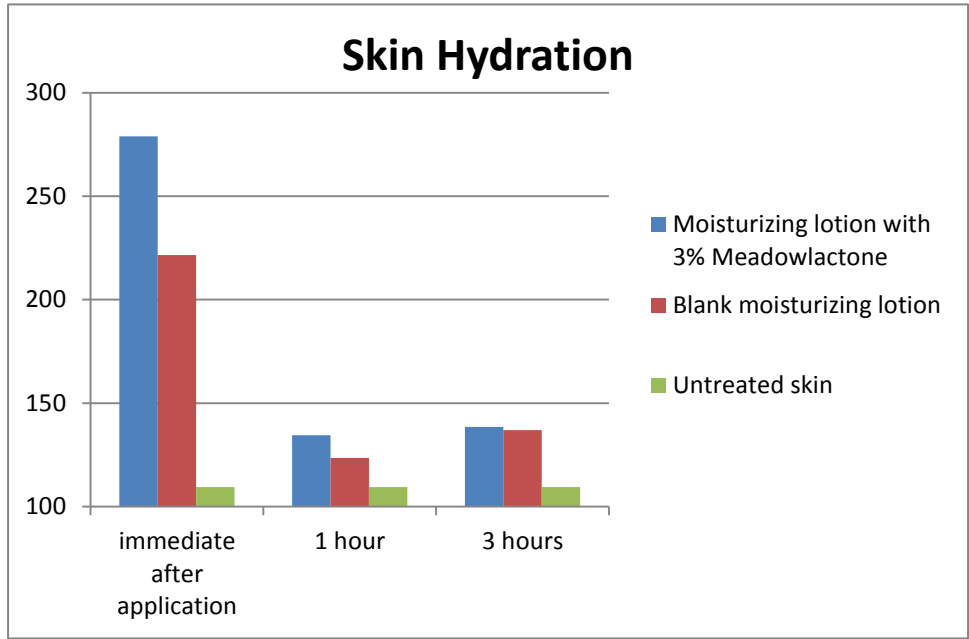
When MEADOWLACTONE® was evaluated in a simple moisturizing cream, after only one application, the moisture content was measurably improved. Skin hydration lasts significantly longer with preparations containing MEADOWLACTONE® making it ideal in all types of skin treatment products.

Figure 1. Test formula

	Blank Lotion %w/w	Test Lotion %w/w
<b>Phase A</b>		
Water	45.00	45.00
Glycerin	3.00	3.00
Hectorite (Bentone® EW (2% aqueous solution))	25.00	25.00
<b>Phase B</b>		
Cetearyl Oliviate, (and) Sorbitan Oliviate (Olivem 1000)	5.00	5.00
Caprylic/Capric Triglyceride (Crodamol GTCC)	18.00	15.00
Cetyl Alcohol	3.00	3.00
<i>Meadowfoam Delta-Lactone (Meadowlactone®)</i>	0	3.00
<b>Phase C</b>		
Phenoxyethanol (and) benzoic acid, dehydroacetic acid (and) ethylhexylglycerin (Euxyl K701)	1.00	1.00
Triethanolamine	Qs to pH 5.5	Qs to pH 5.5

The change in skin moisture content was measured using the Nova DPM 9003BT, which measures hydration through impedance. Volunteers were asked to apply both the base moisturizer and the MEADOWLACTONE® moisturizer to pre-marked areas on their inner arm. Hydration measurements were taken at time 0, 1 hour, and 3 hours. Results showed that the lotion containing MEADOWLACTONE® improved skin's moisture content immediately and sustained a higher level of moisture for over three hours after application (figure 2).

Figure 2. Moisturization results after single application of moisturizer measured through skin impedance in NOVA meter units.



Microphotographic images of skin provide clear visualization of improved texture. Darker areas indicate more moisture, light areas indicate dryness. Sample measured using MoistureMap MM100

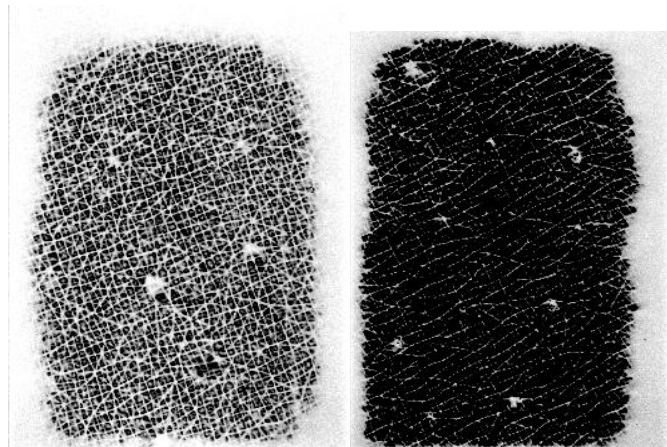


Figure 3. Skin image immediately before and after application of MEADOWLACTONE® moisturizing lotion.

*NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.*

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