



## Semi-solid preparations with gako unguator devices

Using the gako unguator devices as a compounding solution benefits high product quality

- manufacturing range from 20ml up to 2000ml
- reproducible product quality
- time saving in the manufacturing process
- maximum shelf life due to minimum air impact
- no contamination during mix and transfer > mixing jar = dispensing jar
- accredited quality according to globally recognised standards and relevant practices!
- easy ointment extraction due to movable bottom and single hand principle
- simple and hygienic application directly on the skin

## Xerosis

Xerosis, also called dry skin, is a condition that the majority of people will experience at some stage in their lives.

Dry skin can be chronic or may arise acutely in response to changes in the environment, skin care regimen, age, illness and different exogenous and endogenous factors.

Three key skin-related deficiencies play an important role in xerosis: a deficiency in natural moisturizing factor (NMF), a deficiency in ceramides, the skin barrier lipids, and a deficiency of the skin's own moisture network.

Effective treatment of xerosis addresses all three deficiencies to restore skin condition using both active pharmaceutical ingredients (APIs) and dermaceutical ingredients (DCIs). A very comfortable and hydrating topical base is the key to patient compliance in restoring and maintaining a good skin condition.

## Customized treatment of xerosis

Xerosis treatment is focused on restoring hydration of the skin and retaining skin barrier function.

1. APIs can be selected, based on individual dosing, to meet patients' specific treatment needs according to grade of dehydration and loss of barrier function.
2. DCIs can be added to restore or maintain the skin condition and prevent exacerbation.
3. Basic skin care is guaranteed with the proper choice of dermatological vehicles. The vehicles are designed to be suitable for different skin types and serve to nourish the sensitive skin and prevent dehydration.
4. The following preparations can be manufactured with all of the gako unguator devices using the general principle of the Unguator Technology. More information is available on [unguator.com](http://unguator.com)

## Recommended APIs and DCIs in the treatment of xerosis<sup>1</sup>

API	Function	Indication specific dosage (range)	Common dose frequency
Salicylic acid	Keratolytic. Reduces the severity of xerosis	5 to 10%	Twice-daily
DCI	Function	Indication specific dosage (range)	Common dose frequency
Ammonium lactate	Moisturizer. Improves barrier function and symptoms of xerosis	12%	Twice-daily
Arginine HCl	Moisturizer. Improves the clinical symptoms of dry skin	2.5%	Twice-daily
Dexpanthenol	Moisturizer. Nonsteroidal anti-inflammatory agent	1 to 5%	Twice-daily
Glycerol	Moisturizer. Improves barrier function and symptoms of xerosis	2.5 to 20%	Twice-daily
Lactic acid	Moisturizer. Improves barrier function and symptoms of xerosis	10%	Twice-daily
Menthol	Antipruritic effect. Elicits cool sensation	1 to 3%	Twice-daily
Nicotinamide (vit. B3)	Increases biosynthesis of ceramides	2 to 5%	Twice-daily
Shea butter	Moisturizer and emollient. Rich in essential fatty acids	1 to 20%	Twice-daily
Urea	Moisturizer. Improves barrier function and symptoms of xerosis	5 to 40%	Twice-daily

## Recommended vehicles for compounding and basic skin care in the treatment of xerosis

Vehicle		Skin type profile	Skin types
Emolivan™	Natural W/O cold cream base		Oily skin  Very dehydrated skin
Versatile™ Rich	Enriched O/W cream base		Balanced skin  Affected skin
Versatile™	Vanishing O/W cream base		Dehydrated skin  Specific skin area
Nourilite™	Vanishing O/W emulsion base		
Solydra™	Natural oil base		

<sup>1</sup> Literature references available upon request.

## Compounding formulations and basic skin care for xerosis

<b>Rx/</b> Salicylic acid 5% Urea 10% in Emolivan™ S. Apply twice-daily	<b>Rx/</b> Lactic acid 10% Nicotinamide (vit. B3) 4% in Versatile™ Rich S. Apply twice-daily	<b>Rx/</b> Ammonium lactate 12% in Emolivan™ S. Apply twice-daily
<b>Rx/</b> Urea 20% Dexpanthenol 1% Nicotinamide (vit. B3) 4% in Nourilite™ S. Apply twice-daily	<b>Rx/</b> Arginine HCl 2.5% Glycerol 20% in Versatile™ S. Apply twice-daily	<b>Rx/</b> Solydra™ S. Use when bathing or showering

Compounding formulations are based on Fagron Advanced Derma, a solution of our partner Fagron.

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