



## 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

## Hypertrophic scars and keloids

Wound healing constitutes a perfectly coordinated cascade of cellular and molecular events that interact to promote tissue repair. Scarring is a natural part of the wound healing process, and every wound results in some degree of scarring. Excessive scarring can form as a result of aberrations of physiologic wound healing.

Hypertrophic scars stay within the boundaries of the original lesion, whereas keloids are excessive scars that grow beyond the boundaries of the original wound. Once formed, these are hard to remove without invasive surgery. Excessive scarring can strongly affect a patient's quality of life, both physically and psychologically.

Treatment of scars and keloids is focused on preventing fibrous tissue overgrowth. Silicones are considered as the gold-standard prophylactic and treatment option for hypertrophic scars and keloids. Their efficacy and safety have been demonstrated in many clinical studies. Active pharmaceutical ingredients (APIs) and dermaceutical ingredients (DCIs) provide additional support in the treatment of hypertrophic scars and keloids.

## Customized treatment of hypertrophic scars and keloids

The vehicles allow you to offer your patient preparations that are suitable for skin healing of closed wounds. They possess protective and hydrating properties that enhance skin tissue repair.

1. APIs can be selected, based on individual dosing, to meet patients' specific treatment needs according to the severity of the closed wound or scar.
2. DCIs can be added to enhance closed wound healing.
3. Basic skin care is provided by choosing Fagron Advanced Derma vehicles that offer the hydration necessary for skin tissue repair.
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)

# Hypertrophic scars and keloids



## Recommended APIs and DCIs in the treatment of hypertrophic scars and keloids<sup>1</sup>

API	Function	Indication specific dosage (range)	Common dose frequency
Lidocaine (HCl)	Local anaesthetic providing analgesia	5%	Twice-daily
Zinc oxide	Increases the epithelization in burn wounds	20%	Once-daily
	Treatment of proliferative scars	40%	Once-daily

  

DCI	Function	Indication specific dosage (range)	Common dose frequency
Aloe vera extract	Increases epithelization and promotes wound healing. Anti-bacterial	1 to 5%	Twice-daily
Chamomile extract	Increases epithelization	0.5 to 5%	Twice-daily
Dexpanthenol	Activates fibroblast proliferation. Increases epithelization	1 to 5%	Twice-daily
Shea butter	Moisturizer and emollient rich in essential fatty acids. Inhibits pro-inflammatory cytokines and promotes wound healing	5 to 20%	Twice-daily
Tocopherol (vit. E)	Enhances the wound healing process and improves the outcome of scars	2 to 20%	Twice-daily
	When used before and after surgery improves surgical wound healing and aesthetic results	2 to 10%	Twice-daily, before and after surgery

## Recommended vehicles for compounding and basic skin care in the treatment of hypertrophic scars and keloids

Vehicle	Skin type profile	Skin types
<b>Nourisil™</b> Anhydrous silicone base		Oily skin  Very dehydrated skin
<b>Emolivan™</b> Natural W/O cold cream base		Balanced skin  Affected skin
<b>Versatile™ Rich</b> Enriched O/W cream base		Dehydrated skin  Specific skin area
<b>Fitalite™</b> Natural gel cream base		

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

## Compounding formulations and basic skin care for hypertrophic scars and keloids

<b>Rx/</b> Nourisil™ S. Apply at least twice-daily	<b>Rx/</b> Dexpanthenol 3% in Nourisil™ S. Apply at least twice-daily	<b>Rx/</b> Aloe vera extract 5% in Nourisil™ S. Apply at least twice-daily
<b>Rx/</b> Zinc oxide 20% in Emolivan™ S. Apply once-daily	<b>Rx/</b> Chamomile extract 5% in Versatile™ Rich S. Apply twice-daily	<b>Rx/</b> Shea butter 5% in Fitalite™ S. Apply at least twice-daily

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

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