

TeraCeutic™ Ferment



smoothness and resilience for the skin and hair

Actera

TeraCeutic™ Ferment

Fruit Acid & Ferment Exfoliator

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TeraCeutic Ferment is an active ingredient for skin renewal, resurfacing, exfoliation, and brightening. It improves the overall smoothness and radiance of the skin by promoting an optimized cell turnover (desquamation).

Unlike traditional glycolic acid, AHAs, and BHAs, TeraCeutic Ferment is mild on the skin and can be formulated at higher pH.

Physical Description

White Powder

INCI

Saccharomyces Ferment (and) Vitis Vinifera (Grape) Fruit Extract (and) Arginine

Applications

- Complexion perfecting and anti-aging products
- Hair treatments

Benefits

- Less irritating, yet effective exfoliation
- Designed to be efficient at pH ranges that are more compatible with the skin and hair
- Reduces skin scaliness
- Improves the overall skin texture providing more smoothness and radiance
- Enhances hair bounce and elasticity for younger and healthier-looking hair

Recommended Forms

Skin Care

Water-based gels, serums, lotions, and gel-creams

Hair Care

Shampoos, pre-conditioners, hair fluids, and hair masks



improves the overall skin texture
for a smooth and radiant look

Bioactive Rationale

TeraCeutic Ferment is a 100% natural product from the fermentation of brewer's yeast and grape extract. It contains natural organic acids, including alpha- and beta-hydroxy acids (AHA and BHA) from the fruit. Arginine is added to restore skin amino acids while reducing irritation.

Formulation Guidelines

Suggested use level:

Skin care – 4.0 to 15.0%

Hair care – 1.0% to 5.0%

Suggested pH range:

Skin care – 3.0 to 5.0

Hair care – 3.5 to 6.0

ferment & fruit acids
combined for gentle
and effective
skin exfoliation

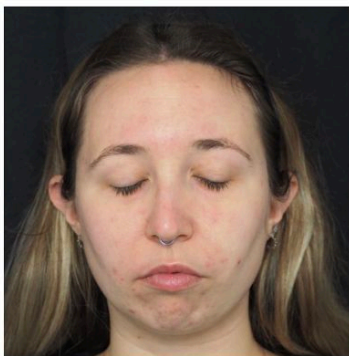
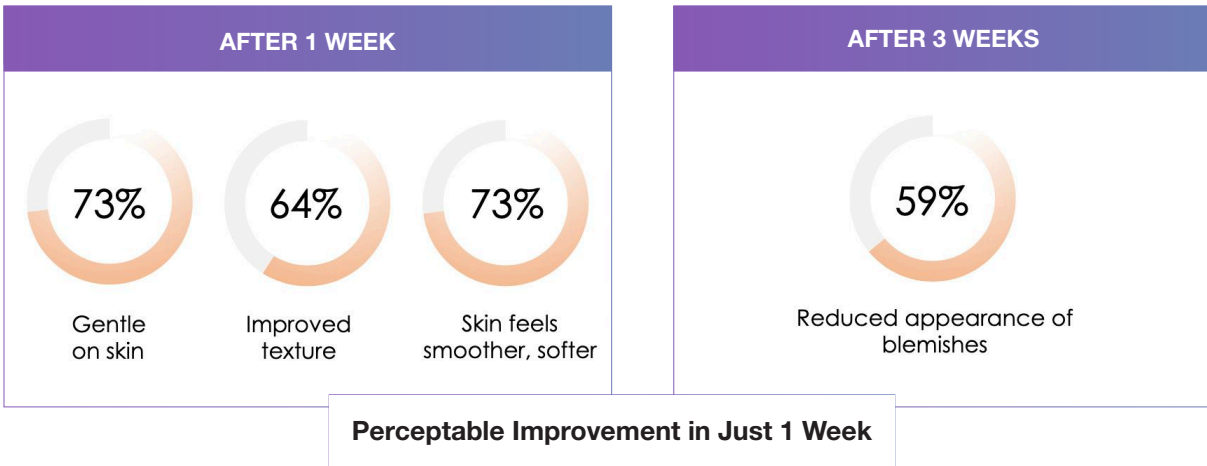


TeraCeutic Ferment is a powder material that can be conveniently added to the water phase of any cosmetic formulation. It readily dissolves with mixing at room temperature, though heat may be used to speed dissolution. At 7.5%, it readily dissolves in water resulting in a solution with pH 4.0. Glycols may help dissolve it when used at levels above 12%.

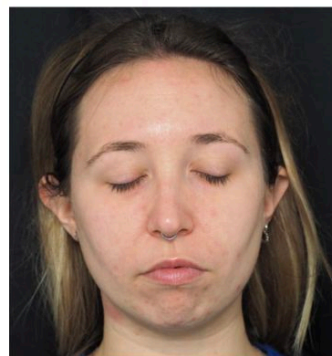
Proven Results

In a 6 week clinical study on 27 female volunteers age 19 – 45, a water-based serum containing 12% TeraCeutic Ferment was applied nightly. Skin smoothness, acne reduction, pore reduction, and overall impression of gentleness were assessed at 1, 3, and 6 week time points via instrumentation and self-assessment questionnaire. After just one week, a significant improvement in texture, acne, and pores was observed and characterized by Bio3D Structured Light and BioBlue Light scanners. A continued improvement was seen at 3 and 6 weeks and perception of gentleness was maintained.

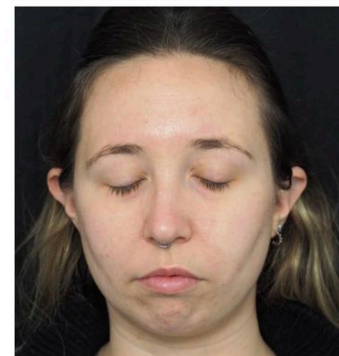
Self-Perception



Baseline

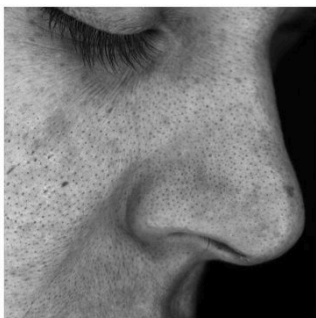


1 week



6 weeks

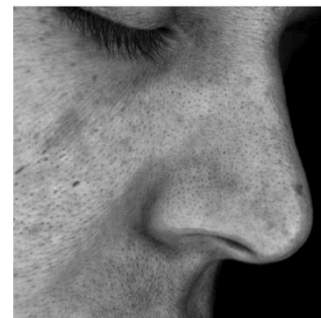
Visible reduction in acne area and severity in one week with continued improvement at 6 weeks



Baseline

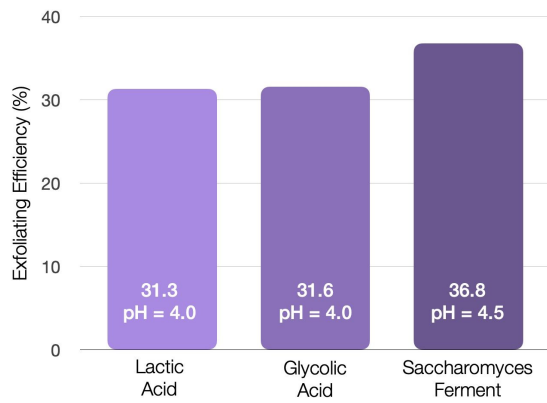


1 week



6 weeks

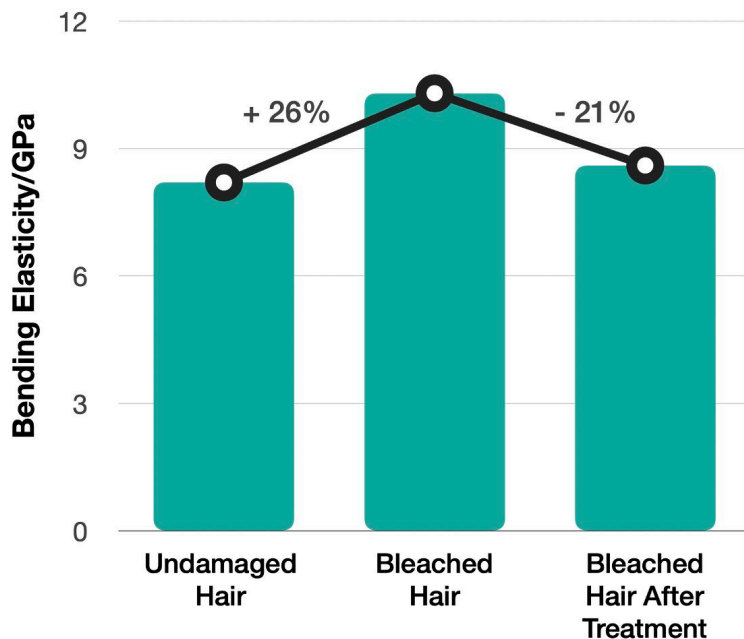
Visible reduction in number and severity of pores in one week with continued improvement at 6 weeks



Gel peels containing 7.5 wt.% active were applied to the forearm of five female subjects aged 40-50.

The area was rubbed for 30 s, rinsed, and patted dry. Skin surface scaliness was determined by D-Squame analysis before treatment and also 15 minutes after rinsing off.

naturally enhances hair bounce and elasticity



Chemical processing (e.g. bleaching), causes hair to become less elastic and break more easily. Therefore, bleached hair requires more force to bend compared to undamaged hair. After treating bleached hair fibers with TeraCeutic Ferment at 2.5% only once, a 21% recovery of natural bounce was observed.

All measurements were taken at 20°C, 65% humidity, using the system Dia-Stron. n=20 fibers, Caucasian hair.

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Resurfacer

Formulation #06-25

This lightweight, gel-like serum features **TeraCeutic™ Ferment**, a 100% natural fermented grape complex containing fruit-derived AHAs and BHAs. This innovative ingredient promotes optimized cell turnover and improves the overall smoothness, radiance, and clarity of the skin. Unlike traditional glycolic acid and other exfoliants, it can be formulated at a higher pH without compromising efficacy.

Phase	INCI	Trade Name	%
A	Deionized Water		Q.S.
	Saccharomyces Ferment (and) Vitis Vinifera (Grape) Fruit Extract (and) Arginine	TeraCeutic™ Ferment	12.0
	Glycerin		2.0
B	Propanediol		2.0
	Caprylyl Glyceryl Ether (and) Caprylhydroxamic Acid (and) Propanediol	TeraStat™ N	2.0
	Xanthan Gum ¹		1.0
C	Citric Acid (or) Sodium Hydroxide		QS pH ~ 4.3
Total			100.0

Procedure

1. Combine Phase A, heat to 60°C and mix until uniform and translucent.
2. Combine Phase B into a uniform slurry.
3. Add Phase B to Phase A while mixing under high shear. Begin cooling.
4. Once at RT, adjust pH using Phase C.

Physical Properties

pH = 4.3 Viscosity = 6,280 cP Appearance: Translucent gel

Stability

Passed 12 weeks at RT and 40°C and 3 cycles F/T
Passed 1 year at RT

Use Instructions

Apply a pea-sized amount to clean face and neck. Follow by serum and moisturizer.

Intended Packaging

Pump or airless pump

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