

MOISTURISING

Gin TONIQ®

MOISTURISING | HYDRATING

Gin TONIQ® is an upcycled botanical active made from gin distillery leftovers. Combining upcycled grain ferment & vegetable glycerine, Gin TONIQ® quenches thirsty skin by offering long-lasting hydration & delivers three times more moisture than glycerine alone.

HYDRATING



Gin TONIQ®

A ZERO WASTE BOTANICAL ACTIVE FOR LONG-LASTING HYDRATION & SKIN MOISTURISATION

Gin TONIQ® is an upcycled botanical active that delivers long-lasting hydration and moisturisation. Made from a by-product of gin distillation, it combines upcycled grain ferment and vegetable glycerine; by working in synergy, these ingredients help to lock in moisture, for longer. It is proven to deliver three times more moisture than glycerine alone and helps to protect the skin from dehydration.

Additionally, Gin TONIQ® has been shown to reduce inflammatory marker IL-8, making it suitable for soothing and calming skincare products. Since grains are abundant in phenolic acids, minerals and carbohydrates, Gin TONIQ® can also deliver an antioxidant boost and help maintain skin health. Overall, Gin TONIQ® boosts skin's moisture levels, combats dehydration & promotes a calmer, healthier complexion.

BENEFITS

- Locks in 3 X MORE moisture than glycerine
- Moisturises skin for longer than glycerine (up to 8 hours)
- Helps to protect skin from dehydration
- Calms & soothes: More than 10% IL8 reduction
- Supports skin health; a source of phenolic acids & antioxidants (such as ferulic acid), minerals & carbohydrates
- Made from a by-product of gin production
- Made in partnership with a zero waste brewery
- Can be used in a wide variety of skincare & body care applications including daily care products

A NEW APPROACH

As the name might suggest, Gin TONIQ® is made from a by-product of gin production. Following distillation, we upcycle the leftover fermented grain (which is packed full of valuable nutrients).

No new materials created.
No existing resources wasted.



INCI Name: Saccharomyces/Barley Seed Ferment Filtrate, Glycerine

Plant Part: Barley

Country of Origin: UK

Method of Extraction: Fermentation / distillation

Appearance: Pale straw to light brown liquid

Suggested Use Level: 1 - 5%

Suggested Application: Skincare (face & body)

Natural: Conforms with ISO 16128,

Degree of Naturality: 1

COSMOS: Yes

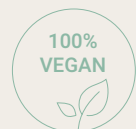
Ecocert: Yes

Preservatives: Glycerine (RSPO certified)

Solvents Used: Water/Glycerine

Water/Glycerine/MPG: Miscible

Ethanol: Miscible



Gin TONIQU[®] *upcycling* PROCESS

We're proud to be working with a zero waste brewery!



East Anglian spring barley is harvested



Malted barley is then fermented to produce the alcohol needed for gin



Using a copper distiller, ethanol is removed



PRODUCT 1: THE GIN

The ethanol is distilled with botanicals before being diluted in order to create the final product: **gin!**



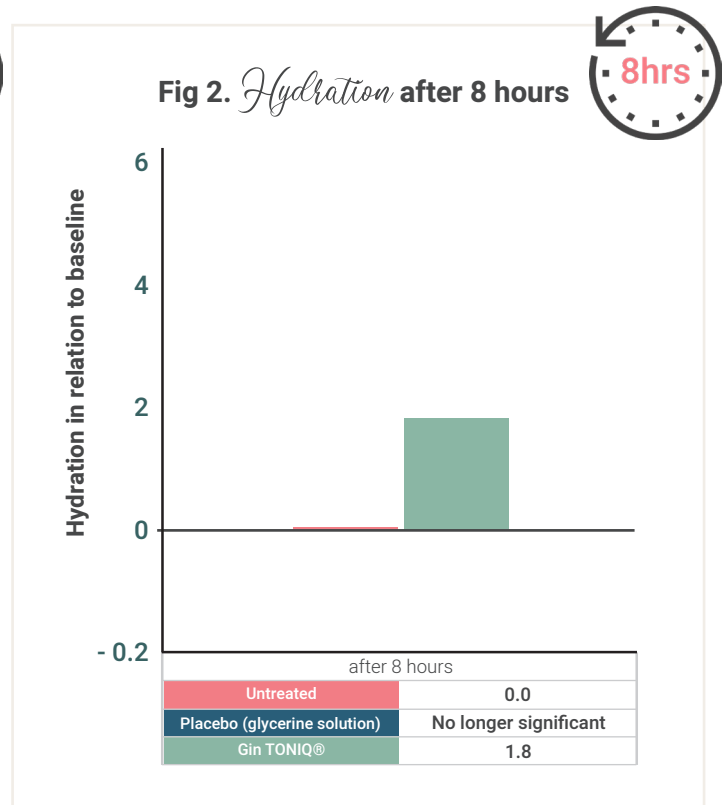
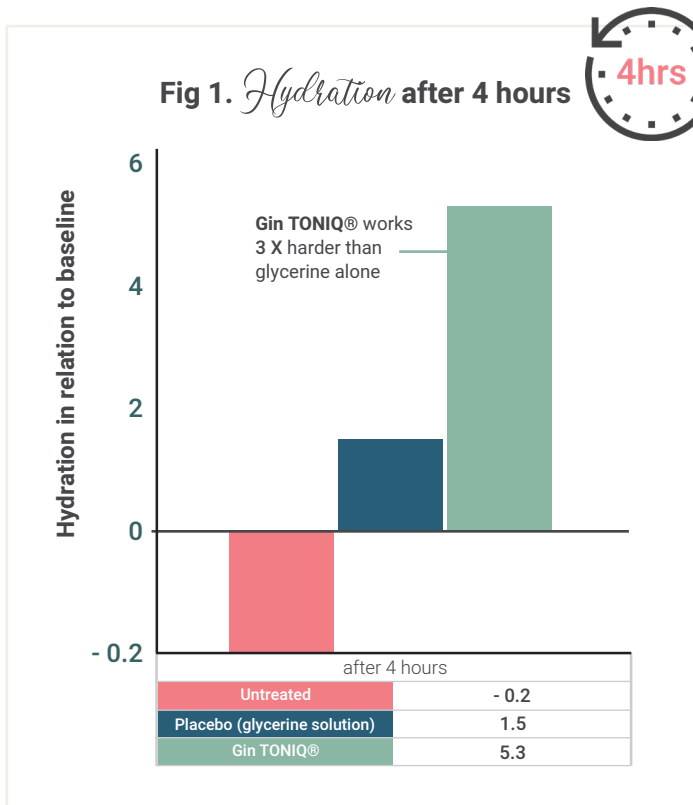
PRODUCT 2: THE WASTE!

This process results in some leftover grain ferment. We capture it fresh, straight from distillation, and combine with glycerine to eliminate the need for any preservative. **The result?** A natural, sustainable, high-performance botanical active!

Moisturisation STUDY

Skin hydration was assessed in vivo using corneometry. Five measurements were performed on the inner forearm of 20 subjects. We compared 5% Gin TONIQ® with a glycerine blend (placebo) and an untreated control. Looking at figure 1, **Gin TONIQ® was proven to deliver three times more moisture than glycerine.**

Figure 2 shows that **Gin TONIQ® continues to deliver moisturisation after 8 hours**, whereas the placebo does not. Therefore, **Gin TONIQ® significantly increases skin hydration after a single application and has an 8 hour moisturisation effect, outperforming glycerine.**



Phenolic ACIDS

Fermented grains contain a large number of phenolic acids including caffeic acid, p-coumeric acid and hydroxycinnamic acid (1).

Ferulic acid is also present in cell walls of grains; a phenolic compound that acts as a potent free radical scavenger and antioxidant. Ferulic acid is known to have a protective role for the main skin structures: keratinocytes, fibroblasts, collagen, elastin (2).

Postbiotic

Fermented ingredients have rapidly grown in popularity in recent years, largely due to their numerous skin benefits. People have used fermentation for thousands of years with the earliest evidence of fermenting beer dating back over 13,000 years ago. The process uses microorganisms to breakdown the larger natural molecules into smaller ones that are more easily absorbed and yields skin-friendly bioactive compounds like postbiotics.

Minerals & Carbohydrates

Fermented grain is typically abundant in carbohydrates, which are known to help lock in moisture; mainly dextrin, which is a polysaccharide obtained from starch (3). Known as a texture enhancer, dextrin may also provide skin-soothing properties that may help to alleviate problematic skin (4). Gin TONIQ® also contains valuable minerals such as calcium, copper, iron, manganese, potassium and sodium, which play an important role in maintaining skin health.



ABOUT FULL CIRCLE

We develop natural and sustainable personal care ingredients that are made entirely from nutrient-rich plant-based materials that would otherwise go to waste.

Our portfolio offers forward-thinking brands & formulators a unique opportunity to create innovative beauty products that make excellent use of the precious resources around us - without compromising on quality or efficacy.



REFERENCES

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