

# ~~I can't imagine~~ making gluten-reduced beer is easy and the taste is ~~never~~ the same.

## Brewers Clarex<sup>®</sup> The Same. Only Simpler.

### Easy, lean stabilization

#### Gluten-reduced beer made easy

Globally, consumers perceive gluten-free products to be “healthier for you” and useful in weight management, with 42% of consumers who say they watch their weight also restricting their intake of gluten-containing foods. Adding to the gluten-free trend, consumers are also looking for diversity in beer. Beer producers are responding to this: in 2015 there was a 62% global rise in gluten-free or gluten-free beer launches.

#### Brewers Clarex

One approach to making gluten-free beer is to change the raw materials from malt to cereals that don't contain gluten. This changes the flavor and aroma profile compared to traditional beer made with barley malt. For producing a beer for consumers who want the traditional beer taste without the gluten, brewers all over the world are discovering the benefits of DSM's solution, Brewers Clarex. It is an easy-to-use enzyme solution that only breaks down the proline containing gluten proteins in malt, without impacting taste and foam or any other characteristics of the beer.

#### Benefits



Effective gluten reduction



Same taste, same quality beer



Easy to apply



Lean stabilization

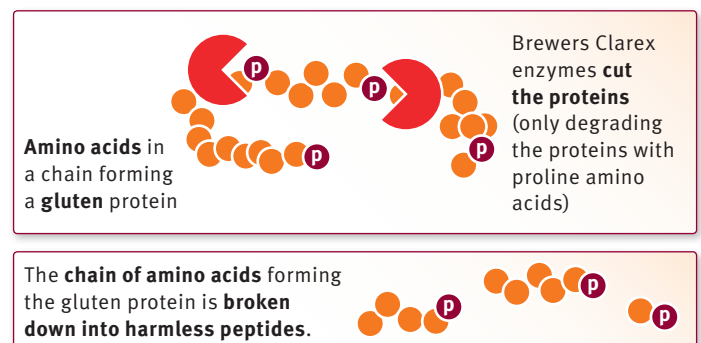







Effective haze reduction

#### Application

The Brewers Clarex enzyme is simply added in a small dose of liquid at the start of the regular beer fermentation process so that it can consistently degrade the gluten from beer. At the same time Brewers Clarex prevents beer haze and enables a shorter, more efficient stabilization process which results in clear beer that remains bright during the shelf life. No significant changes to the brewing process or equipment are required. Brewers Clarex allows brewers to easily produce gluten-reduced beer while still being able to determine their favorite recipe and brew a great tasting beer. It can be used with all types of malts and other raw materials.


#### How Brewers Clarex works



<p><b>Effective gluten reduction</b></p> 	<p>Results based on research* using the R5 ELISA method and even more in-depth protein analysis techniques (Ref. Akeroyd, 2016 etc.), demonstrate that Brewers Clarex® is able to degrade all known immunogenic gluten epitopes in beer, allowing brewers to easily produce gluten-reduced beer while still being able to determine their favorite recipe and brew a great tasting beer.</p>
<p><b>Same taste, same quality beer</b></p> 	<p>Brewers Clarex only breaks down the proline specific (gluten) protein that causes adverse health effects, leaving the other proteins present in beer intact. That is why Brewers Clarex does not impact taste and foam or any other characteristics of the beer. The result is the same tasting, same quality, gluten-reduced beer.</p>
<p><b>Easy to apply</b></p> 	<p>Brewers Clarex is a liquid, allowing for precise dosing and simplifying the beer filtration process or even eliminating this step in some cases, without the need for handling and rinsing of stabilization powder. It can be used with all types of malts and other raw materials. No large equipment is needed to start using Brewers Clarex. Find our dosage calculator at <a href="https://bsgcraftbrewing.com/dsm-brewers-clarex-1kg">https://bsgcraftbrewing.com/dsm-brewers-clarex-1kg</a>.</p>
<p><b>Lean stabilization</b></p> 	<p>Brewers Clarex allows brewers to streamline their stabilization and shorten their maturation time, reducing energy usage and beer and water losses.</p>
<p><b>Effective haze reduction</b></p> 	<p>Brewers Clarex degrades proline-specific proteins, preventing the formation of large complex aggregates with polyphenols which become visible haze in beer. As a result, chill haze is not formed.</p>

\* DSM study in the journal of the ASBC: <http://www.asbcnet.org/publications/journal/vol/2016/Pages/ASBCJ-2016-2300-01.aspx>

## Specifications

Stability data	Packaging	Suitable for the following certifications
<ul style="list-style-type: none"> <li>Recommended storage temperature 4-8° C</li> <li>When stored in recommended condition, the activity loss will be less than 5% within 18 months.</li> </ul>	1 kg bottle 5kg drum 20kg drum	Halal, Kosher, GMO-free 

Beer stabilized with Brewers Clarex supports longer shelf life requirements.

## Gluten-free labeling

**European Union:** beers that contain less than 20 ppm of gluten can be labelled gluten-free.

**Codex Alimentarius guidelines:** gluten level not exceeding 20 mg/kg in total.

**Canada:** beers which measure under 20ppm gluten can be labelled gluten-free in Canada.

**USA:** TTB allows use of the statement “Crafted to remove gluten or [Processed or Treated]” together with a qualifying statement. TTB also requires the submission of results of the R5 Mendez Competitive ELISA assay.

## DSM Food Specialties - Enabling Better Food for Everyone

At DSM Food Specialties, Enabling Better Food for Everyone is our purpose. We provide ingredients and solutions that enable our customers to make healthier and more sustainable consumer food and beverage products. We are driven to partner with our customers to create food choices that people around the world can truly enjoy.

