

ALDC Zyme-FAQs

Q. What is ALDC Zyme?

A. Mr. Malt has repacked valuable brewing enzymes from an industry leading manufacturer to make these solutions available to brewers on a smaller scale, for home brew, brewing trials or for craft and smaller independent brewers. The enzyme is an Alpha-acetolactate decarboxylase, bypassing the formation of diacetyl and other vicinal diketones (VDKs). VDKs have a low flavour threshold and can be hard to measure and manage during standard fermentation and maturation. When beers are dry hopped & "Hop creep" contributes to extra fermentability and fermentation byproducts including troublesome VDKs.

Q. How can it help my range of beers?

A. ALDC Zyme ensures that consistent flavour goals are met where VDKs are not part of the desired flavour profile for the beer recipe. Maturation times can be reduced; this may be especially important during times of peak demand.

Q. I don't like using chemicals/aids. Isn't there a more natural way to produce beers without VDK/Diacetyl issues?

A. Most things are possible with beer, but there is always a compromise! Natural is a challenging term with many grey areas. Enzymes are both natural and high-tech as they are created by living organisms but are powered by clever biotechnology, much like modern beer! VDKs can be controlled without exogenous enzyme addition but ALDC Zyme is a useful, convenient tool to quickly, consistently and effectively manage this challenge.

Q. How does ALDC Zyme work?

A. ALDC Zyme is added to the cold wort prior to fermentation, as fermentation takes place ALDC converts precursors to, rapidly & directly to flavourless byproducts. The traditional method for Diacetyl removal is slow and dependent on many variables such as temperature, pH, wort composition, wort gravity, yeast count, yeast viability, yeast stress & tank geometry.

Q. How should I dose ALDC Zyme?

A. Depending on primarily gravity ALDC Zyme is added at typical rates of 0.5-1 gram per HL. A second addition of ~1g/hl can be made if dry hopping is performed, with the enzyme being added at the same time as the hops to work on fermentation

byproducts as soon as further yeast activity occurs. Craft brewers from the USA have been especially keen to utilise both additions in hop-forward beers.

Q. What beers can it be used for?

A. It can be used in all beer styles, but the greatest benefits will be found in lager styles and dry hopped beers.

Q. Does the activity continue? How is the enzyme denatured/deactivated?

A. The high specificity of the ALDC Zyme means that the specific fermentation byproducts will continue to be targeted until there is no more substrate & the enzyme becomes inactive. ALDC Zyme is considered a brewing aid/processing aid and is not typically labelled.

Q. What about microbial and food safety?

A. The product is stable under recommended storage conditions, with exacting standards of manufacturing and repacking. Any additions to be and wort should be made with care as the brewer would with any other additions e.g. yeast or dry hopping.

Q. Is ALDC Zyme a GMO?

A. ALDC Zyme is not a GMO, does not contain GMOs, and is classified as processing/brewing aid. It is produced by fermentation of microorganisms optimized through modern biotechnologies that are not present in the final product.

Q. Is ALDC Zyme expensive?

A. The high specificity, low dose rate & convenient action make this ALDC a highly cost-effective way to ensure flavour targets are met. Shortened brew cycles and better utilization of equipment and energy is also economically beneficial. We have done our best to minimize costs associated with repacking & our close partnership with the manufacturer as part of brewing supply group with multiple geographical locations helps us source at competitive pricing.

Q. Who can I contact if I have questions?

A. Our technical team!

Italian: christian.cupito@caldic.com,

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