



Document ID:	SPEC-ENZ-P-4
Revision 1	15-Oct-2024
Approved By:	Philip Woodnutt

## Technical Data Sheet

### WHC Mashease Enzyme

<b>Product</b>	
Product Name: <b>WHC Mashease Enzyme</b>	
<b>Product Description</b>	
WHC Mashease Enzyme blend is a specially produced enzyme blend which is specifically designed to improve the mashing process and increase the solubility of wort. It also improves wort filterability after mashing. It is very beneficial when oats or rye are used in the mashing grist. Produced by classical strains of <i>Trichoderma</i> and <i>penicillium</i> it contains both beta glucanase, xylanase, cellulase and beta glucosidase.	
<b>Product Benefits</b>	
In the beer industry with barley as raw material, for example, the enzyme is added in the saccharification stage:	
<ul style="list-style-type: none"><li>Effectively reduce wort viscosity</li><li>Increase the filtration speed to increase the production capacity.</li><li>Increase the concentration of wort.</li><li>Reduce downtime and cleaning frequency.</li><li>Reduce the consumption of filter auxiliaries and reduce costs.</li></ul>	
<b>Specification</b>	
Appearance	<i>Brown liquid</i>
Activity	<i>Not less than 75.000 CX units per gram</i>
EC Code	<i>3.2.1.4</i>
Effective pH	<i>4.0-6.0</i>
Effective Temperature	<i>64°C to 95°C 147°F to 203°F</i>
<b>Guidlines</b>	
Effective temp to 64°C to 95°C [147°F to 203°F]. Dosage is 100-200ml per tonne of cereal.	
<b>Packaging</b>	
WHC Mashease Enzyme is available in 25kg buckets and 1000kg IBC tanks. These materials comply with relevant food-contact legislation, including, EU Regulation 1935/2004 (materials intended for contact with food), EU Regulation 1245/2020 (plastic materials intended for contact with food), EU Regulation 2023/2006 (GMP for materials intended for contact with food), and FDA CFR 21 (174-179) (USA).	
<b>Storage and Handling</b>	
Storage Conditions:	Avoid direct exposure to sunlight or moisture while transporting and storing in cool, dry areas. Keeping original sealed container below 10°C.
Shelf life:	Product activity stays constant for up to 18 months.
Handling:	While the product contains bioactive, non-toxic ingredients, sensitive people may experience allergic reactions. Avoid making unnecessary direct contact with the product. In the event of contact with the skin or eyes, immediately rinse the area well with water for at least 15 minutes. Seek medical attention whenever necessary.

If you have any questions or concerns about our product please contact us at [lab@whclab.com](mailto:lab@whclab.com)

