



PRODUCT NAME: ALPHA ACETOLACTATE DECARBOXYLASE

PRODUCT CODE: ALDC

COMMODITY CODE: 35079090

PACKAGING: 1KG BOTTLE

COUNTRY OF ORIGIN: DENMARK

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## TECHNICAL INFORMATION SHEET

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### **Alpha acetolactate decarboxylase (ALDC) - ENZYMES**

#### **Description**

ALDC is produced from a submerged culture of *Bacillus subtilis*. ALDC caused the direct decarboxylation of alpha acetolactate to acetoin, thus avoiding the production of Diacetyl.

#### **Benefits**

- Reduces Diacetyl production
- Significantly reduces maturation times
- More efficient vessel utilisation
- Improves beer quality

#### **Application and Rates of Use**

##### When used in the initial fermentation

The product can be mixed in with the cold wort at the beginning of fermentation at a rate of 1 to 5 grams per hectolitres of wort which equates to 10 to 50 ppm. To ensure even distribution of the enzyme it is recommended that it be added as the wort is being run into the fermenter.

##### To reduce diacetyl produced after fermentation

When added post fermentation rates of 0.4 to 1.0 grams per hectolitre of wort should be used. The enzyme should be added to the bottom of the vessel and then back flush with carbon dioxide for 5-15 minutes to ensure adequate mixing.

##### Optimum Conditions of Use

The optimum pH for the product lies between 5 and 7; the optimum temperature lies between 25 and 40°C

#### **Guidelines for use**

Check that the product is within its shelf life before use

Read the Safety Data Sheet prior to use

Care should be taken to avoid unnecessary skin contact during handling

## Specification

<b>Product description</b>	Alpha Acetolactate Decarboxylase (ALDC) is produced from a submerged culture of Bacillus subtilis
<b>Appearance</b>	Light brown liquid with a slight opalescence
<b>Odour</b>	Slight odour
<b>Activity</b>	
<b>ALDC Units (U/g)</b>	>2000

### Heavy Metals

<b>Total Heavy Metals</b>	< 30 ppm
<b>Lead</b>	< 5 ppm
<b>Arsenic</b>	< 3 ppm
<b>Mercury</b>	< 0.5 ppm

### Microbiological

<b>Total Plate Count (cfu/ml)</b>	< 10,000
<b>Salmonella</b>	Negative in 25 g

ALDC complies with the current FAO/WHO (JECFA) and Food Chemical Codex (FCC) recommended specifications for food grade enzymes.

## Storage & Shelf life

- Store in cool conditions, away from direct sunlight
- Recommended storage temperature 0 - 10 ° C
- Keep containers sealed when not in use
- Do not allow the product to freeze
- The product gives optimal performance when stored as recommended and used within 18 months from the production date,
- The product can be delivered at ambient temperature.
- Following delivery, the product should be stored as recommended at 0-10°C/32-50°F

## Technical Support

For Health & Safety information on this product, please see the Safety Data Sheet (SDS)

For support and advice on the use of this product, please call or e-mail our Technical Support:-

Telephone:- + 44 (0)115 978 5494

[techsupport@murphyandson.co.uk](mailto:techsupport@murphyandson.co.uk)

For up to date information regarding, Kosher, Halal, Vegetarian, GMO status, or anything not mentioned on this tech sheet please email:-

[compliance@murphyandson.co.uk](mailto:compliance@murphyandson.co.uk) or call +44 (0)115 978 5494

## Reference

<b>PRODUCT</b>	Acetolactate Decarboxylase	<b>PRODUCT CODE</b>	ALDC
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