

# **TECHNICAL INFORMATION SHEET: CELLABRITE - AUXILIARY FININGS**

PRODUCT NAME: CELLABRITE

Description

PRODUCT CODE: CELL

COMMODITY CODE: 13012000

PACKAGING: 25, 200, 600 AND 1000 KG Cellabrite is a ready for use product that is used to clear protein and some yeast out of freshly fermented beer. Cellabrite is a mixed polysaccharide / silicate based auxiliary fining for use in conjunction with isinglass finings to fine cask conditioned beers which are more difficult to clarify.

# Benefits

- Removes the protein that causes haze in beer
- Improves filterability for bright beers
- Reduces conditioning time
- Leads to polished beers
- Speeds up beer processing
- Easily mixed into beer in fermentation vessel or cask
- Long shelf life
- Suitable for vegan beers



#### TECHNICAL SUPPORT

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#### **REGULATORY COMPLIANCE INFORMATION**

Refer to the **Product Specification Sheet** or contact us on tel: +44 (0) 115 978 5494 | e: <u>compliance@murphyandson.co.uk</u>

#### **HEALTH & SAFETY INFORMATION**

Refer to the Safety Data Sheet (SDS)

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# Principle

Auxiliary finings work with isinglass in cask conditioned beers. With many beers, the best clarity is achieved by using an isinglass finings product in combination with an auxiliary. Auxiliary finings can be added at one of several points: into the fermentation vessel, into the beer main feeding the racking heads or into the cask before filled/filling.

# Using the product

## How much of the product to add

Most beers will require an addition of auxiliary finings at a rate between 100ml per hl to 500ml per hl. It is important to note that if auxiliary finings are being used with isinglass, it should be added first before the isinglass.

## Where to add auxiliary finings

Auxiliary finings can be added at one of several points:

## - Into the fermentation vessel

The auxiliary can be added to the fermentation vessel either through the CIP sprayball at the top of the tank or pumped through the outlet valve of the bottom of the tank. The addition should be made at the end of fermentation, as the vessel goes onto chill. The residue fermentation and convection currents are sufficient to mix the product.

## - Into the beer main feeding the racking heads

This method can be combined with proportional metering to ensure the correct rate of addition. The auxiliary is added first followed by the isinglass finings if required.

## - Into the cask before it is filled

The appropriate quantity of auxiliary is put into the cask before filling. If the filling rate is fast and turbulent, isinglass can then be added towards the end of the fill or after.

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#### - Into cask when in pub cellar

Auxiliary finings can also be added to cask beer in the pub cellar to a beer with a persistent haze, and Cellabrite is well formulated for this work.

#### Using auxiliary finings with isinglass

When using auxiliary finings with isinglass, it is important to add it before the isinglass. Otherwise they will not clarify the beer properly. This is because the two products carry opposite charge and will react with each other rather than the hazes on the beer that they are designed to clear.

#### Into the beer main feeding the racking heads

This method can be combined with proportional metering to ensure the correct rate of addition. The auxiliary is added first followed by the isinglass finings if required.

## **Finings** Optimisation

Auxiliary finings should be optimised at the same time as isinglass finings as they are used together. This should be carried out on a regular basis and certainly when a new season's malt comes on stream. Usage rates need to be optimised both to ensure economic cost is achieved and in order to gain the best possible results. Over fining can cause hazes just as under fining can leave hazes: it is not a case of more finings always giving better clarity. An easy way to check your beer fining performance is by using 500ml plastic bottles. An optimisation is run by making trials to optimise the rate of Isinglass addition within the range of 0.4–1.6 litres per hl by adding 2, 4, 6 and 8 mls of RFU Isinglass to 4 labelled 500 ml bottles and mixing well. Samples containing Auxiliary finings within the range 0.2, 0.4, 0.8 and 1.2 litres per hl are set up to run concurrently.

After an appropriate time interval, which will vary with beer type, an assessment is made of the optimum rate of isinglass required to fine the beer. This will not necessarily be the

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brightest beer, since the Auxiliary will improve the polish. With the Isinglass we are looking for the point at which an extra pint of Isinglass appears to add only excess bottoms, with no appreciable improvement in clarity. This rate of Isinglass is then added to all the sample bottles of Auxiliary finings, mixing well. It is then quite easy to check the effects of three or four re-settles as required.

Once an optimum rate has been assessed, it is important to keep a check to ensure that it is going to work. Take a sample of the beer, either from FV after fermentation or from the Conditioning Tank/Racking Back. Add to this the equivalent rate of Auxiliary and mix well. An hour or so later add the optimum rate of Isinglass and remix. Within a short period of time you should see floc formation and clarification of the beer occurring. You can then have peace of mind that the beer should fine well in trade.

However the real purpose of this verification is to find the one occasion when the beer doesn't fine. If you do not get a satisfactory result in a milk bottle then you are highly likely to experience a problem in trade. This simple procedure means that you have an early warning of a potential problem, and that you can take the necessary corrective action whilst the beer is still in one tank and under your full control.

Addition of an 300 ml per hl of Auxiliary for example is rather easier in a tank in the brewery than it is in 40 firkins spread far and wide in the trade.

#### **Clarification products**

Murphy and Son will carry out free finings optimisation for our customers. For Isinglass and Auxiliary optimisations please send in one litre of your unfined beer. All sample must be in plastic containers, fully labelled and accompanied by a cover letter with full contact details.

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# Guidelines for use

#### DO

- Check that the product is within its shelf life before use
- Ensure that auxiliary finings are well mixed into the beer before adding isinglass
- Carry out optimisation trials to determine the correct rate of use
- Read the Safety Data Sheet prior to use

#### DO NOT

- Mix Auxiliary and isinglass before they are added to beer
- Add isinglass finings before auxiliary finings it rarely works
- Add too much auxiliary finings. Tank bottoms will be very loose with high beer losses
- Allow the product to have prolonged contact steel and aluminium.





# Storage and shelf life

- Store in cool conditions away from direct sunlight
- Keep in original container
- Keep containers sealed when not in use
- Storage temperature is 10°C 20°C
- Precipitation may occur at low temperatures
- The shelf life at the recommended storage temperature is one year from the time of manufacture
- The product may take on an opaque appearance when stored for a long time. This doesn't adversely affect its performance.



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ISSUE No.	6	DATE	29/8/18
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