

# TECHNICAL INFORMATION SHEET: SUPERKLEER - AUXILIARY FININGS

**PRODUCT NAME:****SUPERKLEER****PRODUCT CODE:****SK****COMMODITY CODE:****13012000****PACKAGING:****2.4 KG**

## Description

The product is a concentrated dry powder auxiliary finings for use with isinglass finings in clarifying beers. It is dissolved into water before use

## 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
- Very concentrated, saving on storage space
- Shipping costs minimised with a powder formulation
- Long shelf life
- Suitable for vegan beers



### TECHNICAL SUPPORT

tel: +44 (0) 115 978 5494 | e: [techsupport@murphyandson.co.uk](mailto:techsupport@murphyandson.co.uk)

### REGULATORY COMPLIANCE INFORMATION

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

### HEALTH & SAFETY INFORMATION

Refer to the **Safety Data Sheet (SDS)**

## Principle

Auxiliary finings work with isinglass in clarifying 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.

## Using the product

### How to dilute and mix the product

Before it can be used, the product must be dissolved in water 24 hours before it is required.

- Prepare 25 litres of water at a temperature of between 12° and 15°C
- Add the contents of PACK A and stir until dissolved
- Add the contents of PACK B and stir until dissolved
- Allow to stand at between 12° and 15° C for 24 hours
- Add the contents of PACK C and stir until dissolved
- The Superkleer solution is then ready to use as auxiliary finings

### 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, just as the vessel goes onto chill. The residue fermentation and convection currents on cooling 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.

### **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, although our Cellabrite product is better 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 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 unfinned beer. All sample must be in plastic containers, fully labelled and accompanied by a cover letter with full contact details.

## 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 - 15°C
- Precipitation may occur at low temperatures
- The shelf life of the powder product at the recommended storage temperature is indefinite
- The shelf life of the dissolved product at the recommended storage temperature is three months
- A precipitate may form on standing; this does not affect the performance of the product
- The solution may take on an opaque appearance when stored for a long time, again this does not adversely affect its performance although the solution should be discarded if it starts to gel

<b>PRODUCT</b>	SUPERKLEER	<b>PRODUCT CODE</b>	SK
<b>ISSUE No.</b>	2	<b>DATE</b>	4/9/18
<b>WRITTEN BY</b>	E Wray	<b>AUTHORISED BY</b>	RJ Haywood