

# TECHNICAL INFORMATION SHEET: BREWERS CLARITY - ENZYMES

PRODUCT NAME: BREWERS CLARITY

PRODUCT CODE: CLARITY

COMMODITY CODE: 35079090

PACKAGING:

1 KG

# Description

Brewers Clarity is an enzyme used to prevent haze formation in beer. It contains a highly specific fungal endopeptidase enzyme. This enzyme only cleaves haze sensitive polypeptides at the carboxyl end of the amino acid proline.

### **Benefits**

- Prevents chill haze
- No other beer parameters are affected
- Increases production capacity
- Eliminates the cold stabilisation procedure

### Guidelines for use

- Check that the product is within its shelf life before use
- Experiment with additions to determine the minimum effective rates
- Read the Safety Data Sheet prior to use
- Care should be taken to avoid unnecessary skin contact during handling



#### **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: <a href="mailto:compliance@murphyandson.co.uk">compliance@murphyandson.co.uk</a>

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

Refer to the Safety Data Sheet (SDS)



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## Principle

Chill haze in beer results from precipitation of complexed polyphenols and proteins during cold storage. This precipitation has been shown to result from hydrogen bonding between polyphenols and the proline rich fraction of particular polypeptides. This haze develops over time and, initially, is reversible (haze disappears when temperature of beer increases). The chill haze can become permanent as the hydrogen bonding gets stronger.

Brewers Clarity prevents precipitation by hydrolysing the sensitive (haze active) polypeptides. It cleaves specifically the sites where such hydrogen bonding occurs. The specificity of the enzyme ensures that no other beer parameters are affected.

## Application and rates of use

Brewer's clarity can be used with all kinds of malts and other raw materials. The product is added to cooled wort at the beginning of fermentation.

### The required dose rate is determined by:

- the percentage of barley malt, raw barley and/or wheat of the total grist composition
- the specific gravity (Plato) of the wort at the beginning if fermentation
- the shelf-life required (months)

Beer shelf-Life Requirement →		6 - 9 months	9 - 12 months
Raw Material (by extract)	100% barley malt	1 - 2 g/Hl	2 - 3 g/Hl
	60% barley malt	1 - 1.5 g/Hl	1.5 - 2 g/Hl

<sup>\*</sup>Recommended dose rates based on a 12°P wort



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# Storage and shelf life

- Recommended storage temperature 4-8°C
- Keep containers sealed when not in use
- Storage temperature should be constant
- Under recommended conditions, the activity loss will be less than 5% within 18 months



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