

TECHNICAL INFORMATION SHEET: NDB3100 TU (PAPAIN LIQUID) - ENZYMES

PRODUCT NAME:
NDB3100 TU (PAPAIN
LIQUID)

PRODUCT CODE:
NDB3100

COMMODITY CODE:
35079090

PACKAGING:
5 AND 25 KG

Description

NDB3100 (papain) is a solution of proteolytic enzymes extracted from the fruit of the papaya tree. It protects the beer against chill and permanent haze and extends shelf life.

Benefits

- A natural plant extract
- Increases filterability
- Reduces chill and permanent haze formation
- Improves beer shelf life
- Ideal for use in packaged beers

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

tel: +44 (0) 115 978 5494 | e: 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

HEALTH & SAFETY INFORMATION

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

Application and rates of use

NDB3 100 (papain) can be mixed in with the mash, be applied in the fermenter or can be used at post fermentation stage.

Adding NDB3100 (papain) between the stages of post-fermentation and the beer being chilled gives you the advantage of improving filterability as well as reducing chill haze formation and improving beer shelf life. An addition of a reduced amount can also be added at a later stage of the process such as in the conditioning tank. The optimum pH for this product lies between 5 and 7 and the ideal temperature is between the range of 50 to 70°C.

For improvement of an all-malt mash NDB3100 (papain) can be added at rates between 0.5 to 0.7 litres per tonne of dried goods. For use with barley adjuncts the suggested dosage rates are in the range of 5 to 8 litres per tonne of dry goods.

For post fermentation between 4 and 6 ml per hectolitre of NDB3100 (papain) is recommended.

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 1 to 5°C
- Do not allow product to freeze
- Under ideal conditions, 95% of enzyme activity will be retained for a period of at least 3 months, after which time loss may be expected of ca. 1-2% months

PRODUCT	NDB3 100 TU (Papain Liquid)	PRODUCT CODE	NDB3100
ISSUE No.	6	DATE	3/9/18
WRITTEN BY	E Wray	AUTHORISED BY	RJ Haywood