

## Beer analysis



### Introduction

The analysis of beer gives information about its flavour and aroma profile as well as other characteristics which may be linked to quality and mouth-feel. This information is important to brewers to enable them to formulate the best recipe for their brew and to gain consistency between batches, all while producing the best quality beer possible.

Analysis such as **brix**, **colour** and **alcohol**, can help determine consistency between batches of beer and also have an impact on beer mouth-feel. **pH** is an indicator of fermentation acidity and can also affect the flavour and microbial growth in the brew, making it an important component to monitor.

There are a range of analyses that identify the key flavour and aroma compounds in beer including the **beer volatiles** and **beer aroma**. These tests can be useful to identify the flavour profile of a beer and can also be used as a quality control and consistency measure.

One of the more important measurements of beer is its **IBU** (international bitterness units) which measures the bitterness of a beer and can be an important factor used to determine the optimum timing of hops addition for the desired bitterness in the beer. Other analyses used to assess the mouth-feel and quality of beer include **turbidity**, **chill haze testing** and **total acidity**.

### How should samples be submitted?

Full cans or bottles of beer should be submitted where possible.



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# Fact Sheet

ANALYSIS

## What are the costs for beer analysis?

Analysis	Target response time	Volume required	Price per sample (ex. GST)
IBU	24 hours	50 mL	\$26.25
Alcohol by NIR	24 hours	50 mL	\$18.90
Brix	24 hours	10 mL	\$10.50
Plato	24 hours	25 mL	\$10.50
Turbidity	24 hours	50 mL	\$12.60
Carbon dioxide and dissolved oxygen	24 hours	1 full can/bottle (min 150 mL)	\$18.90
Sulfur dioxide (free and total)	24 hours	50 mL	\$31.50
Malic acid (enzymatic)	24 hours	10 mL	\$26.25
Total acidity (as % lactic acid)	24 hours	50 mL	\$22.00
Calcium by ICP	48 hours	15 mL	\$31.50
Chill haze testing	3 days	200 mL	\$25.30
Colour	48 hours	20 mL	\$10.50
pH	24 hours	25 mL	\$8.40
VDK- diacetyl, 2,3-pentanedione	15 days	50 mL	\$150.00
Beer aroma- ethyl octanoate, ethyl hexanoate, ethyl butyrate	10 days	50 mL	\$135.00
Beer volatiles - methanol, ethyl acetate, acetone, 2-butanol, 1-propanol, isobutyl alcohol, 1-butanol	10 days	20 mL	\$85.00
Sugars - glucose and fructose	72 hours	10 mL	\$73.50

To request a tailored quote for large sample numbers (> 10) or analysis packages, please contact [commercialservices@awri.com.au](mailto:commercialservices@awri.com.au).

## Contact

For further information, please contact: AWRI Commercial Services

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