



BEER ANALYSIS AT VINLAB

CHEMICAL AND PHYSIOCHEMICAL PARAMETERS:

- Alcohol
- Real Extract: The amount of dissolved solids in a beer (i.e. everything except the alcohol and CO₂)
- Apparent Extract: The attenuation of beer containing alcohol, excluding the CO₂
- Original Extract: The amount of dissolved solids in wort (1% Plato= 1% w/w)
- Real Degree of Attenuation: The degree to which the dissolved solids in a wort have been fermented. Brewers do not measure residual sugars as winemakers do, but rather the degree of attenuation, i.e. the degree to which the fermentation yeast has consumed its wort sugars.
- pH
- Free and total SO₂
- Dissolved CO₂
- Air Index: A measure of all the gasses excluding CO₂
- Lactic acid
- Colour 430nm
- International Bitterness Units: A stylistic measurement of bitterness as contributed by the hops.
- Diacetyl: A buttery/butterscotch flavour compound produced by yeast and bacteria during production. The sensory threshold in beer is 0.1mg/L. Higher levels are mostly considered undesirable.
- Force tests: Measurements of the various colloidal stabilities of beer to predict shelf-life.

VinLAB (Pty) Ltd
Tel +27 21 882 8866/7 – Fax +27 21 882 8868 – email lab@vinlab.com – www.vinlab.com
P.O.Box 532, Stellenbosch, 7599, South Africa

Information is provided for the convenience of our clients and is not to be considered as a recommendation for specific wine treatment. Information is provided without warranty of any kind, either expressed or implied. The user assumes all risks concerning the accuracy and use of this information. This document may not be reproduced, except in full, without the written permission of Vinlab.



MICROBIOLOGICAL ANALYSIS:

Our methods include tests for yeast, aerobic bacteria and anaerobic bacteria and should be relevant for the presence of any of the following beer spoilage microorganisms:

- Fermentation yeast (usually *Saccharomyces*)
- *Brettanomyces*
- 'Wild' yeast
- Other aerobic yeast
- *Lactobacillus*
- *Pediococcus*
- Acetic acid bacteria
- *Pectinatus*
- *Megasphaera*
- *Zymomonas*

Note that identifying microorganisms by genus is not always possible using these traditional methods. But using culture together with additional techniques we will try to identify as far as possible any microbe growth.

A full beer microbiological analysis includes the following:

- Yeast culture
- Aerobic bacteria culture
- Anaerobic bacteria culture
- Any additional techniques required in further identifying the microorganisms.