

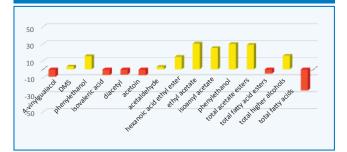


# The Aroma Profile – A Package for Characterizing Beer

### **Aroma Profile - A Helpful Tool for Breweries**

The aroma profile is an analysis package, which was specially developed to allow breweries to have their beer analyzed and characterized on the basis of the most important aroma compounds in beer. The aroma profile is an excellent tool for creating an "aroma finger-print" and can also be utilized to easily detect errors in production (through the presence of off-flavors). Furthermore, with this information, breweries can take measures to achieve the desired aroma profile more easily and rapidly by making changes to the equipment or brewing process (selection of raw materials, fermentation parameters, aeration levels, yeast management, etc.).

#### **Overview of the Aroma Profile Evaluation**



Attribute	Evaluation
Diacetyl (maturation indicator)	below average
DMS (evaporation in the brewhouse)	average
Hexanoic acid ethyl ester (intensity of aeration)	above average
Isovaleric acid (hop storage)	below average
Acetaldehyde (maturation indicator)	average
Ethyl acetate (fruity, solvent-like)	far above average
Isoamyl acetate (banana aroma)	far above average
Phenylethanol (fermentation temperature/intensity)	far above average
4-Vinylguaiacol (clove aroma)	below average
Total acetate esters (flavor carrier)	far above average
Total higher alcohols (fusel alcohols)	above average
Total fatty acids (yeast autolysis)	far below average
Total fatty acid esters (some are flavor carriers)	average

## An Overview of the Aroma Profile – What advantages does the package offer?

- ✓ research into the causes of off-flavors, in order to identify and correct weak points in production
- ✓ improvement of quality over time, both internally and externally
- ✓ detect seasonal fluctuations
- manage fluctuations by adjusting equipment or processes (brewhouse, raw materials, fermentation conditions, yeast management)
- ✓ evaluation in the form of tables and graphs
- ✓ interpretation of the results by experts



#### **Performance Package**

The service package Aroma Profile comprises the following analyses:

- basic beer analysis (original gravity)
- sensory analysis according to the DLG rating scheme
- analysis of the most important beer aroma compounds
- analysis of the most important aroma compounds in green beer
- determination of the sulfur dioxide concentration

For information on current pricing, please consult the List of Services and Fees on our website:

www.blq-weihenstephan.de

