

## MAPS – Malt analytes proficiency scheme

Malt is a complex product and forms a key ingredient in brewing and distilling. It is considered to be at the heart of the process, providing most of the sugars and complex carbohydrates which produce the alcohol and flavour of the final product.

The MAPS scheme covers test materials from the full range of malted barley and barley used for brewing and distilling. These test materials are analysed for a wide range of analytes, using European Brewing Convention (EBC) and Institute of Brewing and Distilling (IBD) methods, as well as a number of other physical and chemical methods.

Meeting the demanding specifications laid down by brewers and distillers is critical to the business of any maltster and is greatly dependent on the quality of the malting barley. For this reason the accuracy of laboratory results is essential as they will ultimately decide if the product is suitable for use in the production plant.



## Scheme operation

The MAPS scheme year operates from January to December and test materials are despatched twelve times per annum. Round despatch dates and reporting deadlines are available on the current MAPS application form, and further information can be found in the MAPS scheme description. These documents can be downloaded from our website www.lgcstandards.com

Test material	Analytes
Brewers and Distillers malt	Malt dependent Alpha amylase, Cold water extract, Diastatic power (DP IoB & DPWK), Dimethyl sulfide (free & total), Dimethyl sulfide precursor, EBC fraction IV (<2.2mm & damaged corns from all other sieves), EBC reject fraction (EBC Fraction IV & foreign matter), Friability, Glassy (whole) corns, Glycosidic nitrile, Hartong VZ45, Homogeneity, Malt mod homogeneity, Malt modification, Moisture, Nitrosodimethylamine, Nitrogen (total), Partly unmodified grains, Phenols (total), Residual sulfur dioxide, Sieving test (<2.20mm, 2.20 to 2.50mm, 2.50 to 2.80mm, >2.80mm)  EBC wort dependent  Beta glucan, Boiled wort colour, Colour, Extract difference (0.2mm-1.0 mm), Extract (0.2mm, 1.0mm), Free alpha amino nitrogen, Fermentability (boiled), Kolbach index, pH, Total soluble nitrogen, Viscosity  loB wort dependent  Beta glucan, Colour, Extract (0.2mm, 0.7mm), Extract difference (0.2mm-0.7mm), Free alpha amino nitrogen, Fermentability (boiled), Fermentability (unboiled 2.0mm, 0.7mm), pH, Predicted spirit yield (as is), Soluble extract difference (0.2mm-0.7mm, 0.2mm-1.0mm), Soluble extract (0.2mm, 0.7mm, 1.0mm), Soluble nitrogen ratio, Total soluble nitrogen, Viscosity
Barley	BRF (8ml test), EBC fraction IV (<2.2mm & damaged corns from all other sieves), EBC reject fraction (EBC fraction IV & foreign matter), Germinative capacity, Germinative energy, Hectolitre weight, Moisture, Nitrogen (total), Sieving test (<2.20mm, <2.25mm, 2.20 to 2.50mm, 2.25 to 2.50mm, >2.50mm, 2.50 to 2.80mm, >2.80mm), Thousand corn weight
Black malt	Colour, Moisture
Crystal malt	Colour, Degrees of crystallisation, Moisture
Malt flour	Deoxynivalenol, Nitrosodimethylamine, Ochratoxin A

For further Information contact LGC Standards:



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