

thermo scientific



Your brand, your quality, your beer

Your best beer, every time, with BeerCraft Software

ThermoFisher
SCIENTIFIC

Expand your beer analysis.

It's valuable, affordable, and easy to implement.

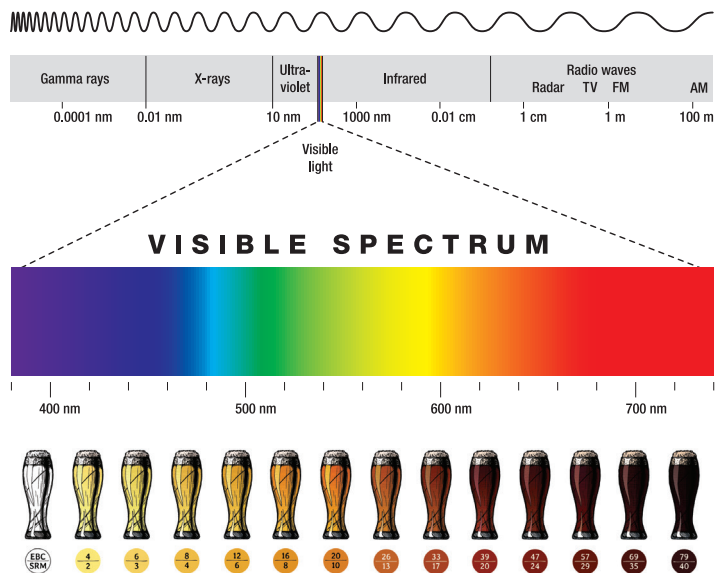
You take pride in the quality of your beer. As your brewery grows, so too will your analytical testing needs. Ensuring batch-to-batch consistency is essential to maintaining your beer's identity and the success of your brand. When you are ready to expand your testing panel, a Thermo Scientific™ GENESYS™ UV-Vis Spectrophotometer with Thermo Scientific™ BeerCraft™ Software will be a valuable addition to your QA/QC laboratory.

Why UV-Vis Spectrophotometry?

- The size, simplicity, and cost-effective operation of a UV-Vis spectrophotometer and the variety of tests available make it an ideal instrument for beer analysis
- International beer organizations recognize the use of UV-Vis as a dependable analytical technique for analyzing beer and evaluating brewing ingredients



GENESYS 150 UV-Vis Spectrophotometer



Get answers fast with BeerCraft Software

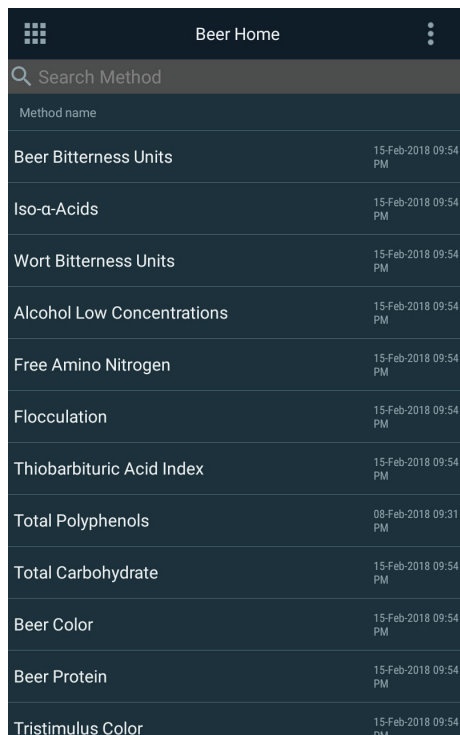
It's as easy as 1-2-3!

BeerCraft Software makes the selection of beer methods easy with the GENESYS UV-Vis Spectrophotometer's large, high-resolution touchscreen and convenient method descriptions. See the example below of one of the many methods you can execute with BeerCraft Software.

Easily measure color by UV-Vis Spectrophotometry

1

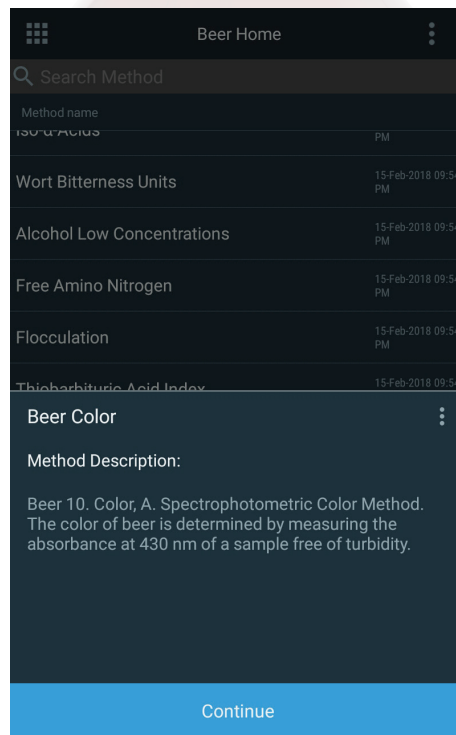
Scroll through the list.



Choose your beer method from the home screen

2

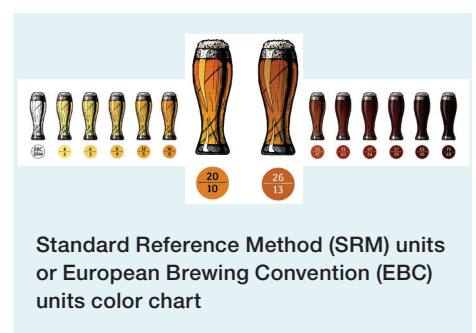
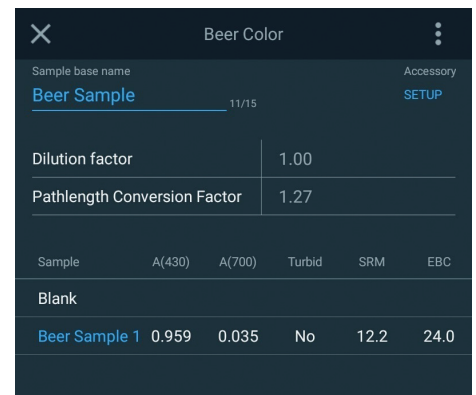
Choose your beer method.



Review the method description

3

Go!



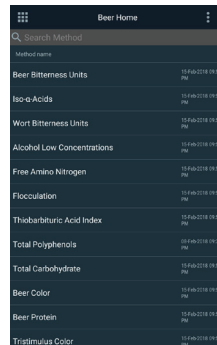
View your result: the color method determined that the beer color was 12.2 SRM or 24.0 EBC.

Getting started

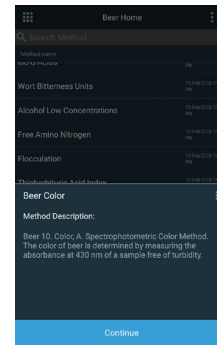
Common methods to begin your analysis

Get started with the most common beer analysis methods. If you need to expand your analysis, there are 20 methods to choose from.

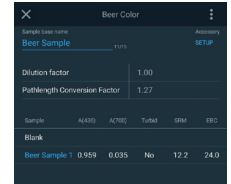
1
Scroll



2
Choose



3
Go!



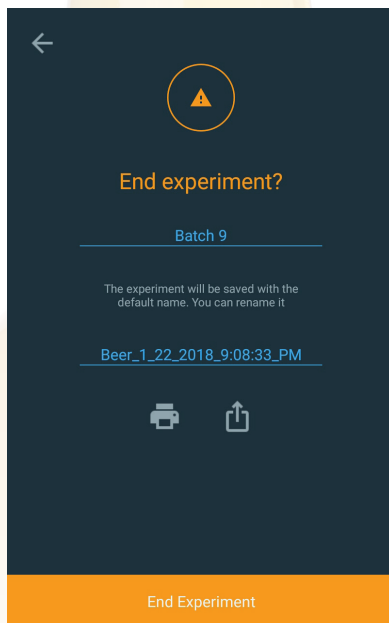
Method Name	ASBC ¹ Method Name	Why you may want to apply this method
 α- and β-Acids	Hops 6. α- and β-Acids in Hops and Hop Pellets, A. α- and β-Acids by Spectrophotometry	<ul style="list-style-type: none"> α-acids are the primary precursor for the bitter principles of beer β-acids are mostly insoluble in the brewing process but still affect bitterness
 Beer Bitterness Units	Beer 23. Beer Bitterness, A. Bitterness Units	<ul style="list-style-type: none"> Measures the International Bitterness Units (IBU or BU) of beer which is a result of the type of hops used in the brewing process and when they are added
 Beer Color	Beer 10. Color, A. Spectrophotometric Color Method	<ul style="list-style-type: none"> Color is one of the most important parameters of beer It governs sensory perception and customer preference
 Beer Protein	Beer 11. Protein, C. By Spectrophotometer	<ul style="list-style-type: none"> Beer protein is partially responsible for beer foam and mouth feel characteristics as well as somewhat responsible for haze and bitter taste
 Iron	Beer 18. Iron, A. Analysis by Colorimetry	<ul style="list-style-type: none"> Iron can enter beer throughout the production process Iron affects the stability, taste, foam, and gushing tendency of beer
 Total Carbohydrate	Beer 41. Total Carbohydrate, A. By Spectrophotometry	<ul style="list-style-type: none"> Carbohydrates include simple and complex sugars as well as starch molecules Enzymes break down simple sugars during fermentation so there should be little to no simple sugars remaining. The remaining sugars and starches are a key component in the type and flavor of the beer
 Tristimulus Color	Beer 10. Color, C. Tristimulus Analysis	<ul style="list-style-type: none"> Provides an additional representation of perceived color Addresses the limitations of single wavelength measurements where, in some cases, beers will have the same SRM color but differ visually

¹ BeerCRAFT Software methods are derived from the American Society of Brewing Chemists (ASBC) Methods of Analysis 14th Edition

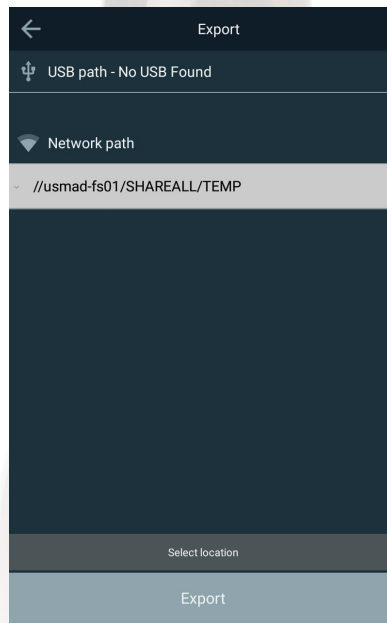
Expand your analytical testing with additional methods for in-process analysis and finished beer

Method Name	ASBC ¹ Method Name
Alcohol Low Concentrations	Beer 4. Alcohol, F. Enzymatic Method for Low Alcohol Concentrations
Alpha-Amylase	Malt 7. Alpha-Amylase, B. Fixed Time and Variable Color
Beer Total Sulfur Dioxide	Beer 21. Total Sulfur Dioxide, A. p-Rosaniline Method
Diacetyl	Beer 25. Diacetyl, B. Broad Spectrum Method for VDK
Dissolved Oxygen	Beer 34. Dissolved Oxygen
Flocculation	Yeast 11. Flocculation, B. Absorbance Method
Free Amino Nitrogen	Beer 31. Free Amino Nitrogen
Iso- α -Acids	Beer 23. Beer Bitterness, F. Iso- α -Acids by Solvent Extraction
Malt Sulfur Dioxide	Malt 11. Sulfur Dioxide
Thiobarbituric Acid Index	Wort 21. Thiobarbituric Acid Index 2009
Total Polyphenols	Beer 35. Total Polyphenols
Reducing Sugar	Malt 6. Diastatic Power, B. Diastatic Power
Wort Bitterness Units	Wort 23. Wort Bitterness, A. Bitterness Units by Spectrophotometry

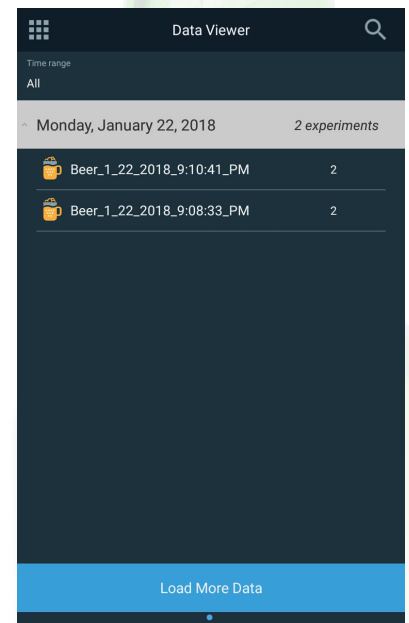
BeerCraft Software offers many convenient features to make saving, exporting, and returning to your data worry free.



Conclude your experiment by saving your results with customized batch names



Retrieve and review data from a single batch using the Data Viewer



Print and save your data locally, to a USB stick, or to a network with an optional Wi-Fi adaptor

GENESYS UV-Vis Spectrophotometers

A proven instrument for demanding QC labs, GENESYS UV-Vis Spectrophotometers will make getting answers quick and easy - no technical experience needed.



Walk-up convenience
– simple-to-use,
high-definition
touchscreen interface

Sampling flexibility
– ideal solutions for both
single cell analysis and
higher throughput with a
cell charger



**GENESYS 150 UV-Vis
Spectrophotometer**

Optional BeerCraft Software
for quality analysis with
20 preprogrammed
methods available at the
touch of a button

Advanced connectivity
– print directly from
on-board control using
the Wi-Fi USB adaptor

Count on GENESYS Spectrophotometers for fast, reliable answers. When you're ready to expand your analytical testing capabilities, it's the ideal choice.

Your best beer, every time, with BeerCraft Software

Implement analytical testing for more consistent beer brewing

- UV-Visible spectrophotometers help breweries meet their quality standards by offering quick and affordable testing as well as more versatility compared to limited instrumentation like a colorimeter
- BeerCraft Software offers 20 preprogrammed ASBC methods to simplify beer quality analytical testing



Thermo Scientific™ GENESYS™ UV-Vis Spectrophotometer

Trusted in QC labs worldwide, GENESYS UV-Vis Spectrophotometers are the ideal choice for fast, reliable measurements.

- Walk-up convenience – simple-to-use, high definition touchscreen interface
- Sampling flexibility – offers single cell analysis and high throughput with 8-cell changer increasing productivity and efficiency
- Built to last – for repetitive use and demanding environments
- Advanced connectivity – print directly from onboard control using the Wi-Fi USB adaptor

Thermo Scientific™ BeerCraft™ Software

Beer Methods ¹		
α- and β-Acids	Diacetyl	Reducing Sugar
Alcohol Low Concentrations	Dissolved Oxygen	Thiobarbituric Acid Index
Alpha-Amylase	Flocculation	Total Carbohydrate
Beer Bitterness Units	Free Amino Nitrogen	Total Polyphenols
Beer Color	Iron	Tristimulus Color
Beer Protein	Iso-α-Acids	Wort Bitterness Units
Beer Total Sulfur Dioxide	Malt Sulfur Dioxide	

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Part Number	Description
833-065400	BeerCraft Software
840-298000	GENESYS 50 UV-Vis Spectrophotometer
840-300000	GENESYS 150 UV-Vis Spectrophotometer
840-278000	Printer Accessory for GENESYS Spectrophotometers
840-303400	GENESYS 8-position Carousel Accessory
840-309900	Wi-Fi adaptor for GENESYS Spectrophotometers

Find out more at thermofisher.com/beercraft