

PRODUCT CODE	PRODUCT NAME	DESCRIPTION	PRICE	Minimum Sample Required	Avg Turnaround (working days)
LAB-POLYPHENOL	Polyphenol analysis in beer	Total Polyphenols analysis by Spectroscopy	£51.00	1 x small pack	5-7 days
LAB-NUTRITIONAL-ANALYSIS	Nutritional analysis in beer samples	Reported as Alcohol Content g/100ml, Total Carbohydrate Content g/100ml and Protein Content g/100ml. Nutritional content reported in kcal energy/100ml and kJ energy/100ml	£151.20	500ml	7-10 days
LAB-MCHECK	General Microbiological Check & Report	General microscopy, yeast count, viability plus a written report	£28.94	50ml	1-2 days
LAB-MICRODP	Sample Analysis by Direct Plating	4 Types of media used. Cask/FV/unfiltered Beer, wort and water samples	£31.63	50ml	3-5 days
LAB-PCR	Sample Analysis by real-time PCR	Identify beer spoilage microorganisms present in yeast slurries, fermentors and packaged beer	£96.00	30ml	1-2 days
LAB-PCR (3+)	Sample Analysis by real-time PCR	Identify beer spoilage microorganisms present in yeast slurries, fermentors and packaged beer	£88.00	30ml	1-2 days
LAB-PEST	Pesticide Screen	Pesticide Screen	£335.00	500ml	14 days
LAB-DIASTATICUS	Identification of <i>S. cerevisiae</i> var. <i>diastaticus</i>	Enrichment and identification of <i>S. cerevisiae</i> var. <i>diastaticus</i> using real-time PCR	£120.00	30ml	3-5 days
LAB-MICROMF	Sample Analysis by Membrane Filtration	Filtered/Sterile Beer samples	£42.00	300ml	3-5 days
LAB-YEASTC	Yeast Contamination Analysis	Includes Direct plating analysis and Yeast Streak Plates	£41.00	50ml	3-5 days

Multiple Order Discount - we will apply a discount on multiple sample orders of ABV, Combined Analysis, Gluten (+3) and PCR tests.

PLEASE NOTE: Any unidentified samples received without an order note with details of the analysis you require and your contact details will be disposed of within 24 hours.

**Brew Optimisation –  
book a visit with one of our  
technical team**

## HOW TO ORDER YOUR CHEMISTRY & MICROBIOLOGICAL TESTS

We have streamlined the process of ordering Chemistry and Microbiological tests to ensure that obtaining crucial insights for your brew is a seamless experience.

### STEP 1: Navigate to our website

Visit the lab service page by typing in the following link: [www.murphyandson.co.uk/our-laboratory-services/chemistry-microbiological-tests/](http://www.murphyandson.co.uk/our-laboratory-services/chemistry-microbiological-tests/)

### STEP 2: Download our Laboratory Sample Form

Please ensure you complete all the relevant information for the type of test you require.

### STEP 3: Provide Sample Details

Complete essential details about your samples, include information about the type of brew, batch number and any specific consideration our experts should be aware of during the analysis.

### STEP 4: Posting Your Samples

Send your samples and a copy of the order form to the following address:

The Laboratory  
Murphy & Son  
Alpine Street  
Nottingham  
NG6 0HQ

### STEP 5: Receipt of Order & Payment

Once we receive your completed form and sample(s), we will be in touch to confirm timescales for your report, which can be up to 10 days from receipt of your samples. Exclusions are ATNC and pesticides which can take up to 2 – 3 weeks.

### STEP 6: Receive Comprehensive Analysis Reports

Once the analysis is complete, you will be sent a detailed report outlining the results of your Chemistry and Microbiological test. Our reports are designed to be easily comprehensible, providing actionable insights to enhance your brewing process.

### STEP 7: Expert Consultation

For any technical queries please contact us on [techsupport@murphyandson.co.uk](mailto:techsupport@murphyandson.co.uk)

# Chemistry & Microbiological Analysis Service



For more information contact us on  
**0115 978 5494** or visit [murphyandson.co.uk](http://murphyandson.co.uk)

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# Unlocking Precision in Brewing with Murphy & Son's Analysis Service

At Murphy & Son, we understand that brewing is both an art and a science. To ensure the highest quality in every batch, our state-of-the-art Chemistry and Microbiological Analysis Service provides an essential tool for brewers aiming to achieve perfection in their craft.



## WHAT SETS US APART



### Expertise

Our team of experienced scientists and technicians bring a wealth of knowledge to the table. With a deep understanding of brewing processes, we tailor our analysis to meet the specific needs of brewers.



### Comprehensive Analysis

From detailed chemical composition to meticulous microbiological scrutiny, our service covers every aspect crucial to brewing excellence. We analyse water quality and scrutinise the microbiological profile, ensuring your brews meet the highest standards.



### Data-Driven Brewing Analysis

Leverage the power of data to optimize your brewing processes. Our precise analyses provide actionable insights, empowering brewers to make informed decisions for process improvement and flavour enhancement.

Accredited by:



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Scan to view UKAS Accreditation

## SERVICES WE OFFER



### Water Analysis

Understand the foundation of your brew with comprehensive water quality analysis, enabling you to fine-tune your water treatment processes.



### Microbiological Examination

Detect and mitigate potential risks by examining the microbiological profile of your brew. Our service helps you maintain a clean and stable brewing environment.



### Customised Solutions

We recognise that each brewery is unique. Our team works closely with you to tailor our analysis services, addressing your specific challenges and goals.



### Technical Support

Experience our unparalleled 1:1 technical support with our seasoned beer, wine, and spirit specialists. From master brewing techniques to production optimisation solutions, our personalised guidance is tailored to your requirements.



### Training Workshops

Delve into the art and science of brewing and distillation, mastering every step of the process with our industry experts. Our hands-on approach ensures you gain practical skills, whilst immersing yourself in the rich tradition and innovations of the craft.



### SUGAR testing

HPLC, an advanced analytical technique, provides the brewer the ability to analyse the sugar composition in either the wort or in the finished beer. This level of analysis provides an insight into the effectiveness of their NALAB production methods, allowing them to adjust accordingly to optimise the process.

## Laboratory Service Price List

PRODUCT CODE	PRODUCT NAME	DESCRIPTION	PRICE	Minimum Sample Required	Avg Turnaround (working days)
LAB-ABVA	ABV Analysis by Anton Paar Alcoalyzer	ABV (UKAS Accredited for beer), present gravity, original gravity analysed by the Anton Paar Alcoalyzer	£25.20	300ml	3-5 days
LAB-ABV	ABV Analysis by Distillation BEER/CIDER/SPIRITS	ABV (UKAS Accredited for beers only), present gravity, original gravity analysed by distillation -	£39.00	500ml	7-10 days
LAB-BU	Bitterness Analysis	Measurement of Bitterness of in a beer/wort sample	£31.16	100ml	3-5 days
LAB-CAA	Combined Analysis (Anton Paar Alcoalyzer ABV)	ABV, present gravity, original gravity, pH, colour and bitterness analysed by the Anton Paar Alcoalyzer (UKAS Accredited for beers only)	£45.10	500ml	5-7 days
LAB-COLOUR	Measurement of Beer Colour	Measurement of beer colour in EBC	£18.00	50ml	3-5 days
LAB-FAN	Free Amino Nitrogen	Measurement of Free Amino Nitrogen in malt/wort/beer	£32.00	100ml	5-7 days
LAB-GLUTEN	Gluten samples	Analysed by Elisa method R5 Gliadin analysis (UKAS Accredited for beers only)	£117.00	100ml	3-5 days
LAB-GLUTEN-FAST	Gluten Fast Turnaround	Analysed by Elisa method R5 Gliadin analysis-Fast Turnaround (UKAS Accredited for beers only)	£157.00	100ml	1-2 days
LAB-ATNC	ATNC	Analysis of Apparent Total Nitrosamine Compounds	£209.55	500ml	15 days
LAB-NA	NDMA (Nitrosodimethylamine) analysis	Analysis carried out to determine Nitrosodimethylamine content	£142.00	500ml	15 days
LAB-HMS	Elemental Analysis Single Element	X1 Element	£30.00	100ml	5 - 7 days
LAB-HM	Elemental Analysis Suite	X 6 Elements analysed by ICP-OES. Arsenic, Cadmium, Copper, Iron, Mercury, Lead.	£138.10	100ml	5 - 7 days
LAB-IA	Ionics Analysis	Calcium, Chloride, Sulphate and Magnesium in Wort & Beer	£38.90	50ml	5-7 days
LAB-FWA	Liquor Analysis	Calcium, Magnesium, Chloride, Sulphate, pH, Total Hardness as CaCO3 Alkalinity as CaCO3 and Nitrate	£29.80	50ml	7-10 days
LAB-FWA-NA	Liquor Analysis plus Sodium	Calcium, Magnesium, Chloride, Sulphate, pH, Total Hardness as CaCO3 Alkalinity as CaCO3, Nitrate and Sodium Analysis (LAB_HMS)	£56.12	50ml	7-10 days
LAB-TAN	Shelf Life Analysis (Tannometer)	Analysis of potential polyphenols & tannins by Tannometer - Filtered Beer Only	£94.61	500ml	7-10 days
LAB-SO2	Sulphur Dioxide Analysis (Total)	Total sulphur dioxide analysis. LOD is 2ppm. Beer, Wine & Cider	£43.90	50ml	5-7 days
LAB-CO2	Carbon Dioxide Analysis in beer	The determination of dissolved carbon dioxide in small pack products	£123.00	1 x small pack	5-7 days
LAB-SUGAR	Sugar (mono- and disaccharide) analysis in both wort and beer	Sugar Analysis in wort and beer HPLC to assist with No and Low Alcohol Beer Production - NABLAB	£85	100mL	5 - 7 days

## WHY CHOOSE MURPHY & SON



### Global Presence

With a reputation built on quality and trust, Murphy & Son serves breweries worldwide, providing analysis services that meet international standards.



### Confidentiality

We understand the sensitivity of your brewing recipes and processes. Rest assured, our analysis service maintains strict confidentiality to protect your intellectual property.



### Elevate Your Brews

Take your brewing to new heights with Murphy & Son's Chemistry and Microbiological Analysis Service. Let precision be the secret ingredient in your pursuit of brewing excellence.



### Audit Tests

We provide a range of tests to pass HMRC, Trading Standard and SALSA audits, from ABV, Microbiology, Heavy Metals, ATNC through to Pathogen Testing (Full Micro).