



FOOD & BEVERAGE LABORATORY ESSENTIALS



Ingeniously Practical

Guardian Hotplate Stirrers

- **Sample Heating and Mixing:** Used to ensure uniform heat distribution during simultaneous heating and stirring
- **Emulsion Preparation:** Create stable emulsions by maintaining appropriate temperatures during mixing
- **Emulsion Stability Testing:** Heat and stir emulsions to evaluate stability and monitor phase separation over time
- **Extraction:** Improves extraction efficiency of flavors, colors, and nutrients from food matrices
- **Fat Extraction:** Heating and stirring the sample in a specific solvent to separate fat from the matrix
- **Dissolution:** Effective in dissolving solids (sugars, flavor compounds) into liquids for analysis or formulation
- **Dissolution of Culture Media:** Heating and stirring to obtain consistent microbial cultures in food testing labs
- **Dilution of Juice Samples in Buffers:** For even distribution of potential yeasts and molds in quality and safety assessments



Shakers

- **Dissolution of Solids:** Aiding in dissolving solid ingredients in liquids and facilitating uniform distribution in formulations
- **Suspension of Solids:** Shakers keep solid particles suspended in liquids
- **Sample Mixing:** Ensure uniform mixing of samples, such as enrichment broths, to enhance microbial growth
- **Extraction Processes:** Utilized in the extraction of flavors, colors, and compounds from food matrices
- **Stability Testing:** Beverages and sauces
- **Fermentation:** Yeast starter cultures growth for beer, wine or dairy production
- **Pesticide Residue Tests:** Extraction step to mix food samples (grains, vegetables) with solvents
- **Microbial Growth:** E. Coli, Listeria or Salmonella for pathogen tests in raw meats and processed food



GUARDIAN™ 5000
Hotplate Stirrer
e-G52HS07C



GUARDIAN™ 3000
Hotplate Stirrer
E-G31HS04C



ENDEAVOR™ 5000
Light Duty Shaker
e-E51LD0420 EU



EXTREME ENVIRONMENT SHAKER
(CO2 shaker)
SHEX1619DG



**INCUBATING COOLING
THERMAL SHAKER**
ISTHBLCTS



ROCKING SHAKER
Digital
SHRK04DG



Laboratory Vortex Mixers

- **Sample Homogenization:** Rapidly mix small volume samples to ensure uniformity
- **Suspension of Solids:** Effectively suspend solid particles in a liquid, which is crucial for accurate analysis
- **Emulsion Preparation:** Facilitate the initial mixing of emulsions, such as dressings and sauces, before further processing
- **Reagent Mixing:** Aids in mixing reagents with samples in preparation for various analytical tests to ensure a complete reaction
- **Mixing Samples with Enrichment Broths:** For optimal growth of potential pathogens
- **Sensory Analysis:** Ensuring sample homogeneity for sensory evaluation, where consistency is vital for accurate taste testing
- **Nutritional content, pesticide residues or contaminants analysis:** After fruit sample homogenization with solvents or buffers

Frontier Centrifuges

- **Separation of Components:** Used to separate solid particles from liquids, such as sediment in juice or other beverages
- **Microbial Analysis:** Concentrate microbial samples for further analysis, such as identifying spoilage organisms in food
- **Extraction:** Enhance extraction of bioactive compounds to facilitate the development of functional foods and supplements
- **Clarification:** Clarify liquids by removing suspended solids and impurities, resulting in clearer, more visually appealing products
- **Protein Isolation:** Isolate proteins from food matrices, helping in nutritional analysis and product development
- **Concentration of Volatile Flavor Compounds:** In sauces or flavorings for sensory analysis and flavor development
- **Milk Fat Separation:** Separate cream from milk for analyzing the fat content and developing low-fat dairy products
- **Sediment Removal:** Clarifying sauces or dressings using centrifugation for a smoother texture



VORTEX MIXER
Analog
VXMNAL



**MULTI-TUBE
VORTEX MIXER**
Analog VXMTAL

FRONTIER™ 5000
Series Multi Pro,
FC5714



FRONTIER™ 5000
Series Mini,
FC5306



Dry Block Heaters

- **Sample Incubation:** Used to incubate microbial cultures at specific temperatures to promote growth in food microbiology studies
- **Enzyme Activity Testing:** Facilitates enzyme assays by providing a stable temperature for reactions to occur
- **Temperature Control for Chemical Reactions:** Maintains precise temperatures for various chemical reactions in food analysis
 - **Quality Control Tests:** Utilized in routine quality control to maintain specific sample temperatures for consistency in testing
 - **Shelf-Life Studies:** Simulate temperature variations during storage to evaluate stability and shelf life of food products under different conditions
- **Melting Point Determination:** Use in QC to determine the melting point of fats and oils, which is essential for product consistency
- **Food Safety Testing:** Heat samples to specific temperatures to test the effectiveness of cooking methods in eliminating pathogens
- **Texture Analysis:** Heat food samples to specific temperatures before conducting texture analysis



DRY BLOCK HEATER
1 Block, Digital
HB1DG



DRY BLOCK HEATER
2 Block, Digital, Heat Lid
HB2DGHL

Achiever Overhead Stirrers

- **Homogenization:** Used to achieve uniform consistency in mixtures like sauces, dressings, and beverages
- **Dissolution of Ingredients:** Facilitates effective dissolution of powdered ingredients (stabilizers or flavor enhancers) in liquids
- **Emulsion Formation:** Create and stabilize emulsions, a crucial step in production of mayonnaise and salad dressings
- **Suspension Mixing:** Effective for suspending solids in liquids, ensuring even distribution in formulations
- **Mixing samples for Rheological Testing:** To evaluate how products flow and deform under stress, critical for texture analysis
- **Fermentation Process:** Aids in maintaining even mixing during fermentation processes (yogurt or beer production), to ensure uniform conditions for microbial activity
- **Syrup Preparation:** Efficient dissolution of sugars and flavoring agents in water to obtain a clear and uniform syrup



ACHIEVER™ 5000
Overhead Stirrer
e-A51ST060

Moisture Balances

- **Quality Control:** Ensures products meet specific moisture content standards, which is crucial for maintaining quality and consistency
- **Product Consistency:** Consistent moisture levels are essential for maintaining the texture, flavor, and overall quality of food products
- **Spoilage Prevention:** Testing moisture content helps control microbial growth and spoilage, ensuring safety and extending longevity
- **Regulatory Compliance:** Many food and beverage products must comply with specific moisture content regulations

Laboratory Balances

- **Precision and Accuracy:** Ensure accurate measurements vital for recipe formulation and ingredient proportions
- **Cost Efficiency:** Precise measurements from analytical balances reduce ingredient waste and lower production costs
- **Quality Assurance:** Accurate measurements ensure product quality and compliance with safety standards in the food and beverage industry

PIONEER™
Analytical balance
PX124



PIONEER™
Precision balance
PX3202



MOISTURE BALANCE
MB62



WHY CHOOSE OHAUS?

To support the growing demands within the food and beverage industry, OHAUS offers innovative products for your laboratories that address common challenges and enhance productivity, ensuring every product you produce meets the highest safety standards.

Here's why OHAUS should be your preferred choice:

- **User-Friendly Design:** With intuitive interfaces, OHAUS equipment is easy to operate, allowing your team to focus on results.
- **Durability:** Built for busy labs, OHAUS products ensure consistent performance in high-demand environments.
- **Compliance Made Easy:** OHAUS products meet global standards, simplifying the management of regulatory requirements.
- **Precision You Can Trust:** OHAUS balances offer industry-leading accuracy, crucial for quality control and formulation.
- **Innovative Technology:** OHAUS products are continually enhanced to improve efficiency.
- **Broad Product Portfolio:** OHAUS offers an expansive range of products, including laboratory equipment, balances, centrifuges, industrial weighing products, weights, clamps, and more!

Make OHAUS your trusted choice to ensure quality and safety in every sip and bite!



Ensure Quality, Safety, and Compliance in Every Test!

Discover how our products can enhance your food and beverage testing processes. Contact us today to learn more or to schedule a demonstration.



OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of balances and scales, lab equipment and lab instruments that meet the weighing, sample processing and measurement needs of multiple industries. We are a global leader in the laboratory, industrial and education markets, as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS produces lab balances, industrial scales, lab equipment and lab instruments that are precise, reliable and affordable, and backed by industry-leading customer support.

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governing the manufacture
of this product is
ISO 9001:2015 certified.

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