

LAB ESSENTIALS FOR PHARMACEUTICAL INDUSTRY



- > Dissolving powders, facilitating chemical reactions and ensuring uniform heat transfer with a real-time temperature monitoring function
- > Range of impeller designs to support different mixing applications



- > Measure viscosity changes in pharmaceutical formulations for vaccines, ointments and suspensions
- > Quality control of liquid pharmaceutical products after formulation and production



- > Moisture removal from granules, wet powders or herbs prior to extraction and production
- > Heat sterilisation to remove microorganisms from raw materials and glassware



- > Grind dry samples such as active pharmaceutical ingredients (APIs), bulk pharmaceuticals and excipients to optimise drug delivery and performance
- > Gamma-sterilised disposable grinding chambers available



- T 25 easy clean control ULTRA-TURRAX®
- > High-shear homogenization and/or emulsification of liquid pharmaceuticals products (suitable for cleanroom use)
- > Safety temperature setting to prevent degradation of temperature-sensitive APIs during the process



- > Programmable cooling rate for crystallisation
- > Support organ baths with a temperature stability of +/- 0.01 °C

ElectraSyn 2.0: Modern breakthrough in drug synthesis

/// Electrochemistry for synthetic chemists

GERMAN TECHNOLOGY. AMERICAN DESIGN.

- > 3-in-1: potentiostat, analytical device and a stir plate
- > Automated data logging and data transfer with the ElectraSyn app
- > Compatibility with new accessories with a simple software update

PATENTED

LIFE-TIME **WARRANTY**



- > Used for drug design and synthesis
- > Quick cyclic voltammetry analysis
- > Application support and guidance
- > Beginner friendly

COMPARED TO CONVENTIONAL CHEMICAL SYNTHESIS METHODS, ELECTRASYN 2.0 OFFERS:

- > Novel Reactivity
- > Simplicity
- > Reproducibility
- > Scalability
- > Sustainability
- > Safety



MODULARITY WITH ACCESSORIES



E-Hive

- > High throughput screening platform
- > Drug screening and early stage drug discovery



GOGO Module

> Run reactions under external reaction conditions



Carousel

- > 6 concurrent reactions
- > Easy scale up



Pro-Divide

> For divided cell reactions

A complete system for your pharmaceutical formulation

/// Heating, cooling, mixing, dispersing, vacuum control, real-time pH, temperature and torque trend measurement in a closed vessel



Benefits of using the IKA LR 1000 lab reactor system for pharmaceutical formulations

- Mixing to ensure mixture is uniform and homogenous (support up to 150,000mPa.s)
- Incorporating with high-shear disperser to form stable emulsion/suspension
- > Heating and cooling function
- $\,\,{}^{\backprime}$ Strong vacuum for defoaming even while mixing

- > Real-time pH measurement
- > Torque trend measurement to indicate viscosity changes
- › Optional documentation and control via labworldsoft® software
- > Ensuring reproducibility and repeatability
- > Easier scale-up with clearly defined parameters

EXAMPLES OF APPLICATIONS IN PHARMACEUTICALS

Ointments, gels, eye drops, eye ointment, cough mixtures, sugar/salt solutions, suppository masses, coatings, antiseptics, lipid emulsions





