

HOMOGENIZING, INDUSTRY, & PRO PRODUCT INFORMATION SHEET

What is Homogenizing?

- Homogenizing equipment is used in sample preparation to breakdown various types of samples within tubes-to-beakers and containers.
- Sample preparation is done in all industries, and mechanical homogenizing equipment (also known as rotor-stator homogenizing) is the most commonly chosen. Rotor-Stator refers to the stainless steel generator probe. Outer component is a stator & inner component that spins is a rotor.
- Mechanical homogenizing equipment refers to the homogenizer unit & stainless steel generator probe. These two items are needed together to process a sample.
- Other methods are ultrasonic & pressure homogenizing. However, mechanical homogenizing is typically cost effect, takes less time, less noisy, process more types of samples, can reach similar sample breakdown levels, and introduces minimal or no heat into the sample.
- It can process liquid, soft, or tough samples. For purpose of an emulsions, analysis, etc.

Industry Targets & Sample Types

- Cannabis Infused Product Emulsions (Lotions, Drinks, Edibles, Vape Liquid, tinctures, etc.)
- Life Science-Universities (Ex. Cells, Tissue, RNA/DNA)
- Liquid Industrial from Field or Lab testing, also used with titration system (Ex. Chemicals, Oils, Inks, Dyes, Petroleum/Crude Oil)
- Environmental Labs & Water Treatment (Ex. Filter Paper, Plants, Soil, Waste Water, etc.)
- Pharmaceutical (Ex. Pill tablets, ointments, Liquids), Compound Pharmacy, Lab R&D
- Cosmetic R&D and Small Batch Processing (Ex. Lotion Shampoos, Eyeliner, and Mascara)
- Food Safety Testing (Fish, Poultry, Pork, etc.)
- Food & Beverage, R&D testing and Small Batch Productions, (Ex. Beverages, Beer & Spirits, Pasta, Rice, Fruits & Vegetables, Juices, Sauces, Soups, etc.)

About PRO Scientific

- Located in Oxford Connecticut, USA
- Over 40 years of experience in homogenization and manufacturing
- Known for a range of homogenizing equipment & systems from hand-held to large benchtop to automation and custom product capabilities.
- Priding itself on high quality products that are built to last and personalized customer service
- Matching customers with the proper equipment for the best results is the number one focus

HOMOGENIZING, INDUSTRY, & PRO PRODUCT INFORMATION SHEET

PRO Scientific Products

- Hand-Held or Post Mounted Homogenizers: Bio-Gen PRO200 & PRO250, 0.03ml-500ml & 0.03ml-5L
- Various Package Kits: Processing in Micro-Tubes, All Tubes, Tube-Beaker, Beaker to Small Container
- D-Series Digital Benchtop Homogenizers: PRO25D, PRO400DS, PRO400DSEL, 0.03ml-5L & 1.5ml-30L
- Multi-Sample Equip.: Multi-Gen 7XL Homogenizing Package, 0.5ml-35ml (Unique Probes, 12-Pack)
- Automated Homogenizing Systems- Multi-Sample Processing: Multi-Prep & DPS-20

Why Sell PRO Scientific Products?

- Cost effective for great homogenization performance for the best results in shorter time.
- Sample breakdown level can reach a very low nanoparticle level, as small as 1 micron
- Small batch production & complete product testing provides less than 1% failure rate
- Manufacturing is Made in the USA since 1992. All homogenizers have a 2 Year Warranty
- Each probe has a double bearing design for strength & stability. Most competitors do not offer.
- Highest quality stainless steel probe (tool/aggregate) design with a 2 Year Homogenizer Connection Warranty. Only in the industry.
 - Probes have a unique quick-connect interlock to homogenizer ensuring safety, no vibration, and longer product life compared to other competitor models
- Probe rotor-stator design gives tight clearance for fast & complete sample breakdown

