

SONIMIXER

SMX-80

**SONICATOR
+
STIRRER**

FRONTIER SONISTIRRER

- **Cosmetic Production**
- **Chinese Herbal Medicine Extraction**
- **Drug Processing**
- **Environmental Detection**
- **Emulsification**
- **Protein Extraction**
- **Dissolution**

SONIMIXER

Frontier Technology, combined with non-contact ultrasonic and stirring function. SoniMixer has been applied to many fields, including cosmetics manufacturing, Chinese herbal medicine extraction, environmental testing, emulsification, drug processing, protein and enzyme extraction, dissolution, and other related industries. Beyond traditional heating stirrer or sonication system, SoniMixer can quickly enhance sample's solubility and dissolution efficiency., Overcome the bottleneck of oil in water emulsion, no additional surfactant or chemical solvent needed, sample can quickly be homogenized, dissolved, and emulsified.



Easy-to-operate

- No complicated power parameter settings
- Only need to set the sonication time, you can easily perform a variety of applications

No need of specific container

- Applicable to most laboratory glassware; perfectly fit your laboratory workflow



Magnetic stirring

- Stable magnetic stirring (95~700rpm)
- No splash; no air bubbles

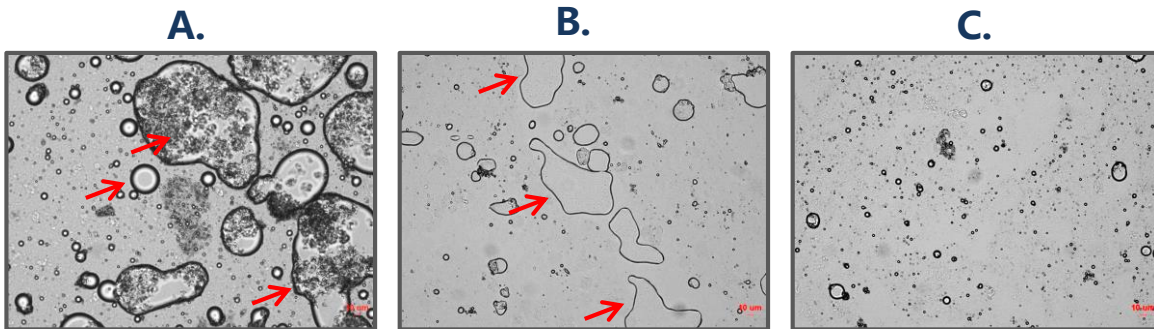
Room temperature water bath

- Dissolve materials without heating
- Avoid structural alteration of samples



Tachometer

- Detect stirring speed promptly
- Maintain reproducibility of the experiment



Dissolution comparison of active ingredient in cosmetic products

Dissolve additional biologically active substances in lotion using different methods.

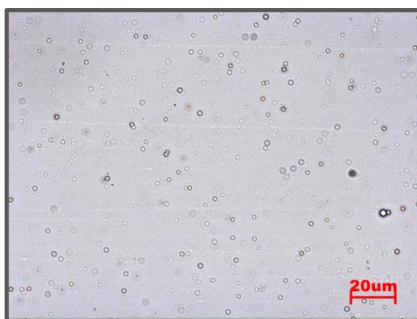
A. Traditional ultrasonic cleaner for 10 minutes

B. Stirrer-only for 10 minutes

C. SoniMixer – sonication with stir for 10 minutes

Result A and B still present particle aggregation (as shown by the red arrow)

Result C (SoniMixer) presents evenly distributed particles



Particle Size Analysis of emulsion

The particle size of oil droplet is analyzed by microscopy after W/O emulsion using SoniMixer. The results showed that the average particle size of oil droplets are around 2-5µm.

W/O emulsion

Untreated



Stir
10 minutes



SoniMixer
10 minutes



No heating, no emulsifier required, with SoniMixer, sample can be quickly emulsified and keep samples' biological activity or drug activity.



Bottom Co-Axial Technology (BCA)

- Unique Bottom Co-Axial Technology - capable of conducting magnetic stirring and ultrasonication at the same time
- Non-contact sonicator - prevent cross-contamination and overheat damage of samples
- Enhance the outcome of ultrasonic treatment and sample homogenization

Product Specification

SMX-80	
Power Supply	100-240V, 50/60Hz, 0.25A
Power consumption	75W
Unit dimension	350(W) x 290(D) x 170(H) mm
Operation interface	Digital
Sonication cycle	1 ~ 9999 cycle
Sonication time	ON: 1 ~ 30 sec / OFF: 1 ~ 99 sec
Rotation speed	95-700 rpm
Motor type	Precious metal gear motor
Stir bar size	5 ~ 80 mm
Sample volume	10 ml ~ 1000 ml
Weight	6.3kg



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