

New nanoparticle deagglomeration technology

The tendency for some nanoparticles to agglomerate or cluster into denser masses can lead to homogeneity and performance issues in their subsequent use. Existing methodologies to de-agglomerate them do not always produce uniform results, or can be invasive and wasteful.



The [Thinky PR-1 Nanoparticle Dispersion Machine](#) is a desktop unit which can **disperse carbon nanotubes (CNT), graphene and other 2D nanomaterials**, within a closed container. The nanoparticle deagglomeration is very even and consistent, is highly reproducible, and is typically accomplished in a few minutes.

The **Thinky PR-1** uses mechanical rotation and multi-directional ultrasonics to achieve a rapid and even particle dispersion. It has a temperature limit control in the ultrasonic bath to counter the

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temperature rise of water and materials as a result of ultrasonic energy, avoiding changes in physical material properties. The system is compatible with quantities as small as a 5ml capacity vial to a 200ml capacity stainless steel container.

The **Thinky PR-1** offers benefits to researchers and developers in sectors such as **drug delivery, imaging, tissue engineering, and biosensors**. Nanomaterials prepared with the Thinky PR-1 may then be mixed with other materials in a [Thinky planetary centrifugal mixer](#).

This video shows how it works:

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