Mixing Application Bulletin

Polymer and Viscous Liquid Blending

Resodyn

How You Think About Mixing and Processing

Resodyn Acoustic Mixers' second generation technology, **LabRAM II**, provides up to I kg payload capacity and advanced control features. Virtually any combination of liquids, powders, pastes, and gases can be processed faster, better, more efficiently, and more productively using the **LabRAM II** bench-top mixing systems and accessories. (www.resodynmixers.com)

Polymer-Liquid Blending with RAM

Many polymer based processing applications require additional ingredients for performance or coloration.

To illustrate RAM's ability to quickly and thoroughly mix ingredients of different characteristics, food coloring was blended with corn syrup (polymer surrogate).

The starting materials were 235 grams of corn syrup and 2.5 grams of food coloring.

Processing was performed at 20° C with the corn syrup exhibiting a viscosity of 2,100 cP. The materials were blended using the *Lab*RAM™ II mixer.

After only 4 seconds of mixing, the two materials were thoroughly blended, with the liquid fully dispersed within the corn syrup. The use of **RAM[™]** technology is well suited for dispersion of liquids into polymers.

All RAM machines can also incorporate vacuum processing before, during and after mixing for applications requiring degassing. For videos of this and other mixes, please visit:

www.resodynmixers.com/applications





ResonantAcoustic[®] Mixer Value Proposition

- Mix 10-100 times faster than traditional mixers
- Improve product quality to new levels
- Reduce or eliminate clean-up costs



• Eliminate cross-contamination

- Scale easily from development to production
- Scale up without increased processing time





130 North Main Street, Suite 630 Butte, MT USA 59701 (406) 497-5333 info@ResodynMixers.com www.ResodynMixers.com



Innovative Mixing Solutions

RAM Product Family

How You Think About



ResonantAcoustic® Mixing performance is available across the **RAM** product line, enabling results and new product development not possible with traditional mixing methods. All **RAM** products use *low*frequency acoustic mixing at up to 100 g's of acceleration of intense, low-shear mixing for:

- 10x 100x faster processing
- Highly repeatable processing results

- Exceptional ingredient distribution
- Hazardous material compatible options
- Direct scaling from laboratory to production without increases in processing time

Capacities (Batch Basis) *Lab*RAM[™] II - 1.1 lbs. (1 kg) *Omni*RAM - 11 lbs. (5 kg) RAM 5 - 80 lbs. (36 kg) RAM 55 - 920 lbs. (419 kg)

Witness RAM Technology First Hand, with Your Own Materials:

Contact today to arrange a FREE RAM demonstration and mixing tests at your facility.

