Mixing Application Bulletin

**Blending Corn Syrup with Powdered Sugar and Sand**

*Resodyn Acoustic Mixers'* second generation technology, *LabRAM II*, provides up to 1 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](http://www.resodynmixers.com))

**Loaded Polymer Blending with RAM**

To illustrate a heavily loaded polymer blend, two different material sizes of powdered sugar and sand were blended with corn syrup (polymer surrogate). The top image to the right shows the starting materials while the image on the bottom shows the results after mixing. The starting materials were 80 grams of corn syrup, 20 grams of colored sand and 80 grams of powdered sugar. The materials were mixed at 20°C with the corn syrup exhibiting a viscosity of 2,100 cP.

The materials were blended using the *LabRAM II* mixer. After 30 seconds of mixing the materials were thoroughly blended with all solids loaded into the corn syrup. Final viscosity of the mixture was 350,000 cP.

The use of RAM™ technology is perfectly suited for loading of solids into polymers and mixing highly loaded polymers once combined.

For videos of this and other material mixes, please visit: [www.resodynmixers.com/applications](http://www.resodynmixers.com/applications)

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**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

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Innovative Mixing Solutions

RAM Product Family

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)**
- LabRAM™ II - 1.1 lbs. (1 kg)
- OmniRAM - 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.

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