

NanoPack Inc.

985 Old Eagle School Rd., Suite 501, Wayne, PA 19087 484.367.7015 www.nanopackinc.com



news release

For Immediate Release

April 23, 2010

Contact:

[Technical Inquiries](#)

[News Media Inquiries](#)

(See Last Page)

NanoPack Achieves Noteworthy Success with Barrier Properties on PLA Film

Popular Packaging Film Now Includes Enhanced Environmental & Economic Advantages

Wayne, Pa. – NanoPack Inc., which develops proprietary barrier coatings used in packaging processed foods, has announced considerable success in improving moisture vapor and oxygen barriers on clear PLA (polylactic acid) packaging films. These impressive barriers result in longer shelf life for food products.

NanoPack began its research in 2005, and introduced its first commercial products in late 2008. The first in what will be a series of patents has recently been awarded by the European Patent Office.

The popular PLA film is biodegradable and has provided NanoPack and its NanoSeal™ technology with numerous opportunities to meet demands from a growing number of converters and end users in the food industry. These customers are choosing PLA because it is a film made from a renewable resource such as corn starch in the United States or often sugarcane elsewhere in the world. In addition, PLA is compostable.

The NanoPack coating system creates a good barrier, *and* bonds well to PLA films: an added benefit since coatings do not normally adhere well to PLA. NanoPack is now testing its PLA film barrier system with a rising number of converters for various applications such as nuts, chips, dry mixes and confectionery products. NanoSeal™ is the best performing, environmentally friendly alternative to creating barrier on PLA films.

“We have succeeded in coating PLA films and achieved a reduction in moisture vapor transmission rate (MVTR) as well as oxygen transmission rate (OTR),” explained Howard Kravitz, president and chief executive officer of NanoPack. “Plus, our coating is the leading barrier alternative for PLA that degrades in landfills.”

Kravitz added that the transmission rate improvements have been dramatic with NanoPack coatings on PLA.

“With NanoSeal™, we’ve achieved OTRs with standard PLA that have dropped from 70cc per 100 square inches per day at one atmosphere (cc/100in²/day-atm) to a mere 0.2 cc/100in²/day-atm. Our MVTRs for the same PLA film have declined from 30-35 grams per 100 square inches per day at one atmosphere (gms/100in²/day-atm) down to just 6 gms/100in²/day-atm. These values can be further improved with metallization applied directly on top of our coating.”

The patented NanoSeal™ technology also provides flavor and aroma barriers - - a topic of growing interest in the packaging industry today. Applicable markets include spices, confectionaries and coffee.

“We have packaging and converting industry leaders looking at our coatings on films such as PLA, BOPP, PET and BON for dry snacks, coffee and a number of other dry applications,” Kravitz added. “Understandably, our customers and end users wish to remain anonymous at the present time, but we are extremely fortunate to have the level of interest we have achieved today.”

The environmental benefits of NanoSeal™ are also enhanced by economics: less material is used to achieve better barrier than polyvinylidene chloride (PVdC), ethylene vinyl alcohol (EVOH) and polyvinyl alcohol (PVOH). And, the elimination of chlorine-bearing PVdC reduces processing and disposal concerns. Technical details about NanoSeal™ are at the website:

<http://www.nanopackinc.com/pdfs/NanoSealWhitePaperv-April10.pdf>

###

Technical Contact:

Howard Kravitz, President & CEO
NanoPack Inc.
(484) 367-7015 x302 (Eastern Time)
hkravitz88@nanopackinc.com
www.nanopackinc.com

Media Contact:

Don Shook
MERIT Media Relations
(702) 260-7600 (Pacific Time)
ds@MMRpr.com
www.MMRpr.com