

Milliken presents

# Taiwanese thermoformer of PP food packaging partners with Milliken to find a clear way forward

South Plastic Industry Co. Ltd., a leading Asian manufacturer of thermoformed plastic food packaging, has been striving for years to develop a clear, anti-fogging polypropylene (PP) lid for its microwaveable food packaging. The aim has been to replace oriented polystyrene (OPS) in this key application, but it wasn't easy to find a way to get the highly recyclable PP to meet all the necessary performance requirements while also retaining the clarity and non-yellowing aesthetics that are vital to appealing to consumers on the grocery store shelves. Until now.



Based in New Taipei City, Taiwan, South Plastic Industry (or SPI) has leveraged its close, five-year working relationship with additives supplier Milliken & Company to finally achieve its goals.

Using Milliken's Millad® NX® 8000 clarifier, the two parties have produced an UltraClear™ PP resin that delivers on all the performance promises for ready-meal packaging, while also offering additional processing benefits. SPI also recently began using Milliken's Hyperform® HPN® performance additives in its PP formulations, as well.

"By using Milliken's additives, we are able to thermoform our products at a lower processing temperature, which allows us to reduce our energy use," said Mr Toshio Wang, President of SPI. "At the same time," he said, "these additives allow SPI to produce a thinner PP lid without affecting rigidity, which in turn helps to reduce plastic usage while increasing output."

Saving energy during processing is a major plus for SPI, which runs dozens of thermoforming machines in its Taiwan plant.

"Milliken's additives produce an UltraClear PP that prevents yellowing, reduces oxidation reaction, and extends the shelf life of packaged product," added Kua Cheng Huat, Milliken Sales Manager for Taiwan. But its crystal clarity is one of the most important features.

Many suppliers use oriented PS resin for their ready-meal packaging lids, but those can only withstand 85°C temperatures and are not suitable for microwaveable products. With UltraClear PP, such packaged foods can go straight from the refrigerator to the microwave while retaining the necessary clarity and aesthetics.



SPI, which now uses Milliken clarifiers all its UltraClear PP packaging products, says it plans in the future to also explore using the material to expand the use of PP in more food applications, including some that currently use PET.

When it comes to thermoformed polypropylene food packaging for South Plastic Industry, the way forward is clear and involves further close collaboration with Milliken.

For more details and information please contact us or visit us online at [chemical.milliken.com](https://chemical.milliken.com)

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