



Vistamaxx<sup>™</sup> performance polymers

## Rethink Recycle: Turning discarded milk tea cups to useful phone cases



**Improved** toughness



Improved flowability



Comfortable touch

Data and results presented herein apply specifically to the noted application under this fact sheet. Your results may differ depending on factors such as operating conditions, equipment and materials used.

## Challenge

Everyone, corporations and individuals alike are looking for ways to reduce their impact on the environment.

Meituan Waimai, China's number one food delivery service, understood the need to recycle so they launched the Blue Mountain initiative to encourage the reuse of food packaging. They identified HeyTea as a possible partner. As a leading vendor of milk tea, HeyTea uses tens of millions of disposable cups every year. The cups are made of polypropylene, a common material for food packaging since it's resistant to high temperatures and corrosion. But when it's recycled on its own it becomes brittle, so it was difficult to find a worthwhile end product.



#### Solution

Meituan Waimai contacted TRASHAUS, a circular economy partner. TRASHAUS suggested turning the cups into cellphone cases, a useful product that would be popular with young consumers, but they needed help to overcome the limitations of the polypropylene. Rhino, a leading PCR recycler and compounder, suggested Vistamaxx<sup>™</sup> performance polymers could improve the recycle and allow them to make the project a reality.

#### ExxonMobil joined the project as a partner. Vistamaxx performance polymers:

- Improved toughness, reducing the brittleness of the polypropylene
- Improved flowability, making production easier
- Offered a comfortable touch, important for a product that is held in the hand for a long time

Each phone case used half a tea cup and only 0.6g of Vistamaxx polymers.

#### Results

Using Vistamaxx performance polymers allowed the partners to create a useful phone case from milk tea cups that would have previously been discarded. Meituan Waimai and HeyTea introduced the project to 12 Shanghai stores. Consumers were pleased to see that their tea cups could have a second life and the industry was excited to see an example of what can happen when you Rethink Recycle.

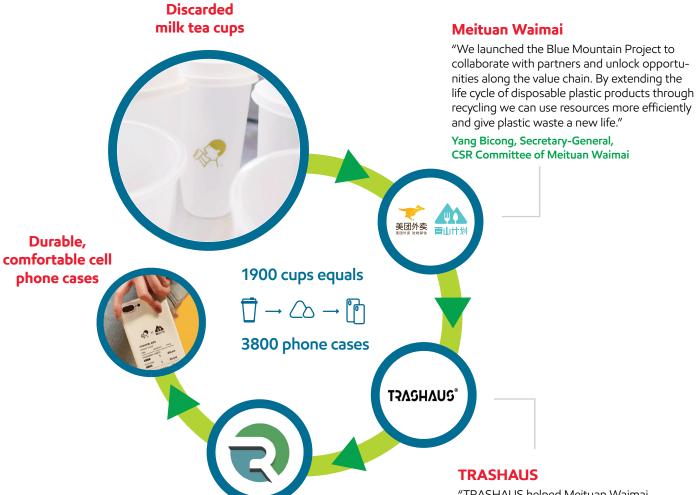






# From discarded tea cups to cell phone cases, Vistamaxx<sup>™</sup> performance polymers can give plastic waste a new life.

By working in partnership throughout the value chain, Meituan Waimai, HeyTea, TRASHAUS, Rhino and ExxonMobil took an unwanted product and made something useful and desirable.



#### Rhino

"Milk tea cups and food containers are typically made from polypropylene, which cannot typically be used in recycled products because it becomes brittle after recycling. Adding Vistamaxx performance polymers, enhances the impact strength and durability, which makes it possible to make cell phone cases with comfortable touch."

Andy Liu, Deputy General Manager, Guangdong Rhino New Material Technology Co., Ltd. "TRASHAUS helped Meituan Waimai design and build up a recycling program for a takeout food and beverage packaging, and explore more diverse solutions. For young people nowadays cell phone cases are not just to protect phones or make them stylish, but also a way of self-expression.

Through insightful design and creativity, we transformed the discarded cups into cell phone cases that stay with customers and bring them joy."

Vans Zhang, Founder, TRASHAUS

### What's new: ExxonMobil Signature Polymers

All our polymers are now positioned under a single portfolio brand: Signature Polymers. The aim is to simplify our product architecture and naming to improve portfolio navigation for you. We would like to stress that our commitment to high quality products remains the same. The composition of the products are unchanged, it is only the names that updated. We will be making these modifications over the next few months, through mid 2025, so you will see both old and new grade names highlighted during that time. Grade slate of Vistamaxx<sup>™</sup> performance polymers will keep unchanged.

Want to see what's changed in our portfolio? Go to exxonmobilchemical.com/sptransform



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ExxonMobil Signature Polymers was born from the belief that people fuel progress. From automotive and construction to packaging, agriculture, industrial, and beyond, we leverage the scale and reach of ExxonMobil to deliver the insights and innovations that empower our diverse, global partners to take their businesses to new heights. We continuously work to provide the listen-first, service-driven, gamechanging collaboration that unlocks opportunities for our partners and advances their sustainability and business goals.

