



Energy lives here™

Achieve™ Advanced PP eliminates fan cover damage for Camel Appliances Manufacturing Co.

Key benefits



Improved durability

- Improved impact performance by 500% vs. reference homopolymer polypropylene
- Enhanced stiffness by 40% vs. reference homopolymer PP



Premium high gloss appearance

Excellent gloss levels not possible with other ICP grades



Easy to process

Injection molding using existing molds and equipment



Recyclable

Recyclable in communities that have programs and facilities in place that collect and recycle these items

Challenge

The appliances market in the Asia Pacific region is highly competitive and growing fast. To stand out among global brands, regional appliance makers must offer high quality products at affordable prices. Camel Appliances, a well-known appliance manufacturer in the Philippines, was concerned that 0.8% of its pedestal fans were being returned because fan covers became damaged during handling and delivery. The company began searching for a more durable and aesthetically pleasing alternative to the homopolymer polypropylene (PP) that it had been using to make the fan covers.

Solution

Camel Appliances shared their challenges with ExxonMobil, with whom they had been collaborating for over 15 years. Because of this long-standing relationship, Camel Appliances was confident that ExxonMobil could provide an innovative, high-quality solution for its fan covers supported by excellent technical expertise. ExxonMobil sent Camel Appliances a sample of Achieve Advanced PP7123KNE1, and after successful trials, Camel Appliances replaced homopolymer PP with Achieve Advanced PP7123KNE1.

Results

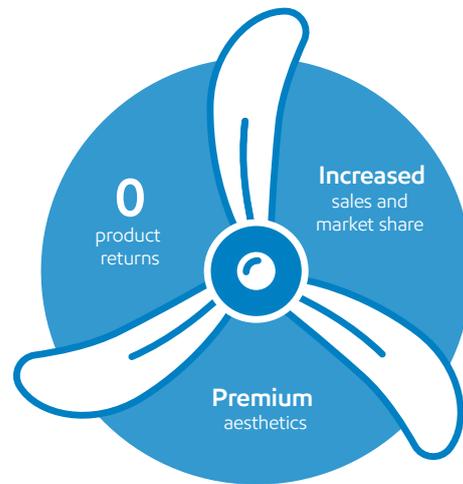
Just three months after switching from homopolymer PP to Achieve Advanced PP7123KNE1, Camel Appliances reported zero product returns and increased sales and market share domestically, with interest from other Asia Pacific markets. After seeing the improvement in the durability and appearance of the fan covers, Camel Appliances started to explore the use of Achieve Advanced PP7123KNE1 in other appliance components, including washing machine covers.

Challenge reality and rethink what's possible in appliance components with durable, aesthetically pleasing Achieve™ Advanced PP

"The switch to Achieve Advanced PP has been a very affordable solution. The pedestal fans have been very well accepted in the market and with product returns reduced to zero. Meanwhile, our reputation as an early adopter of innovative solutions has been enhanced."

Imelda Ty, Vice President, Manufacturing
Camel Appliances

Just three months after switching from homopolymer PP to Achieve™ Advanced PP7123KNE1, Camel Appliances attained the following results:



Better and balanced performance of Achieve™ Advanced PP7123KNE1

Generally homopolymer PP has higher gloss than common ICP grades, but its impact is significantly lower which causes parts breakage. Achieve™ Advanced PP7123KNE1 has similar gloss level to homopolymer PP while delivering much better impact performance.

Achieve™ Advanced PP7123KNE1 can replace common ICP and thereby help enhance product aesthetics while maintaining durability.

Achieve™ Advanced PP7123KNE1

Property	Unit	Typical value	Test Method based on
Melt Mass-Flow Rate (MFR) (230°C, 2160g)	g/10 min	11	ASTM D1238
Tensile Stress at Yield (23°C)	MPa	30.8	ISO 527-2/50
Flexural Modulus (2.0mm/min)	MPa	1680	ISO 178
Notched Izod Impact Strength (23°C)	kJ/m2	6.9	ISO 180/1A
Heat Deflection Temperature (HDT) @0.45MPa	°C	102	ISO 75-2/Bf
Gloss (60°)	-	89	ASTM D523



Contact us for more information:
[exxonmobilchemical.com/pp](https://www.exxonmobilchemical.com/pp)

P0223-657E11

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