

Sustainable PP Products

Preferred Partner for Sustainable PP Solutions



HMC Polymers Sustainable PP Products

HMC Polymers proudly offers a diverse range of high-quality sustainable polypropylene (PP) to ensure our customers achieve the best solutions contributing to a greener future.



Sustainable Feedstock

Bio-Circular PP*

made from second generation Bio-Based feedstock based on waste and residues.

Advance Recycling PP*

made from PCR mixed plastic wastes through pyrolysis process.

*All grades manufactured by HMC Polymers can be offered by mass balance with unique sustainability declaration.

Mechanical Recycling PP

PCR PP grade with US FDA LNO is also available.

Conventional Virgin PP

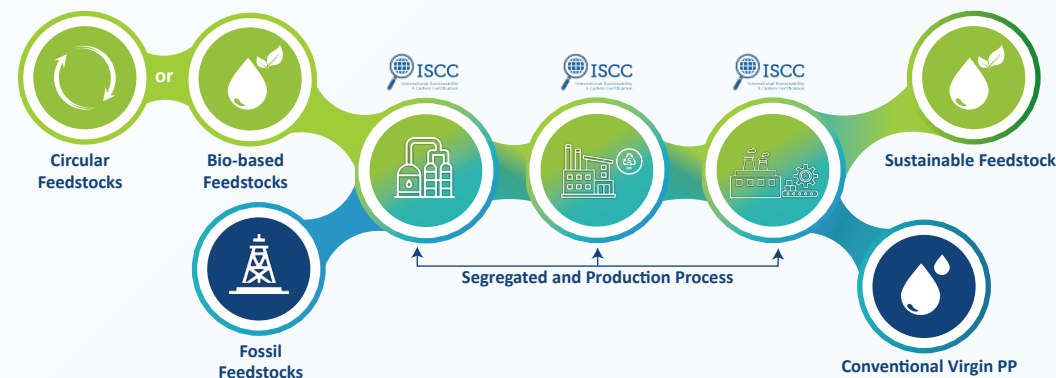
Continuous development high performance PP grade to reduce weight, redesign for recyclability and replace conventional materials with more sustainable PP solution.

REDUCE / RECYCLED

REDESIGN & REPLACE



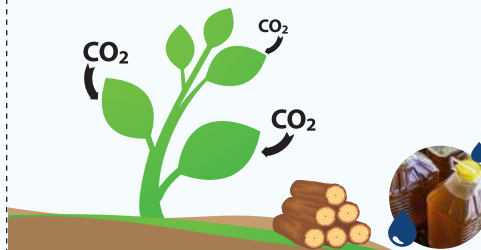
Sustainable Circular & Bio-Circular PP Solutions from HMC Polymers



- HMC Polymers is ISCC Plus certified and offer full traceability.
- HMC Polymers can offer Bio-Circular and Circular (Advance recycling or PCR) products on mass balance basis.
- Fossil feedstock is blended with Bio-Circular or Circular feedstock and Sustainability credits are allocated to PP grades on mass balance basis.
- HMC Polymers can issue unique sustainability declarations for each transaction.
- Manufacturing process, catalyst and product additive recipes are the same.
- Final PP product performance is expected to be the same for Fossil or Bio-Circular or Circular products.
- No need to re-qualify grade performance.
- Full FDA compliance can be declared.



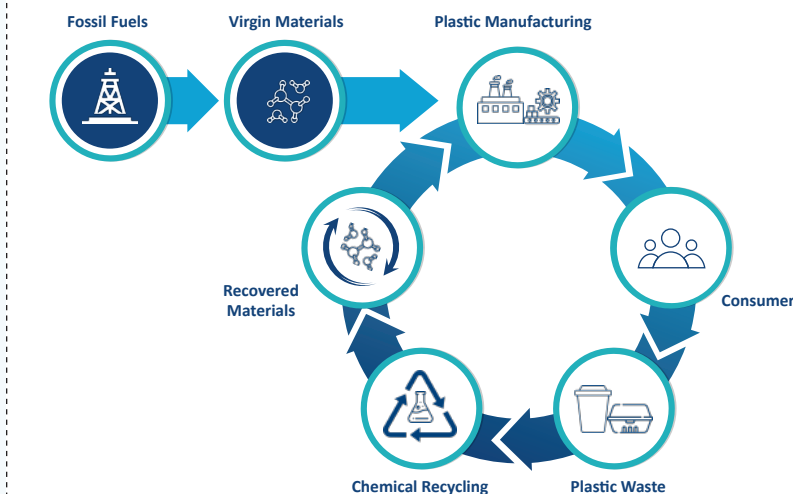
Bio-Circular feedstock to reduce CO₂ emissions



- HMC Polymers uses second generation Bio-based feedstock based on waste and residues
- Plants and renewable biomass absorb CO₂ from atmosphere during their life and contribute to carbon footprint reduction
- Cradle to gate LCA analysis based on renewable feedstock show potential for carbon footprint reduction compared to fossil counterparts
- All grades manufactured by HMC Polymers can be offered by mass balance with unique sustainability declaration



Advance Recycling for Circular PP - PCR



1. Post consumer plastic waste converted back to oil by Pyrolysis process
2. Pyrolysis oil is used in the refinery to produce C3 monomer
3. HMC Polymers uses C3 monomer from PCR or advance recycling to produce Circular PP resins

Mechanical Recycling for Circular PP - PCR

HMC Polymers is certified to the Global Recycled Standard (GRS) which certified recycled material from the source of final products. Certified number is CGI-700274.



PCR made from local waste sources; Food & beverage packaging and household packaging.

Products	Applications
100% Post-Consumer Recycled PP (PCR PP)	Raffia
PCR PP Natural color	Injection
Odor removal	e.g. Household, Packaging, Appliances
PCR PP with US FDA LNO	Film
	Compound



Less new plastic used



Less carbon footprint



Engage circular economy



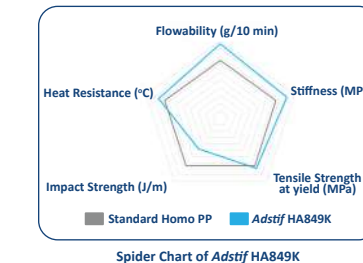
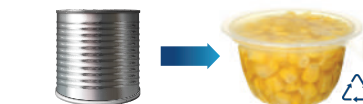
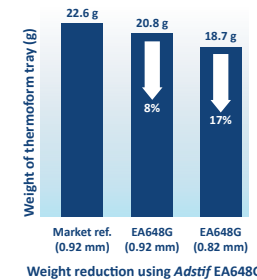
Sustainable PP Solution High Performance PP to reduce packaging weight at source

Adstif EA648G

Adstif EA648G is designed for high heat and cold impact resistance for freezer to microwave thermoformed trays and sheet

Key features

- High stiffness copolymer produced from 5th generation non phthalate catalyst
- High stiffness and impact strength balance
- High Temperature resistance and deformation resistance
- Wide operating window from freezer to microwave applications
- Good stain resistance
- Good processing performance by vacuum forming and pressure forming



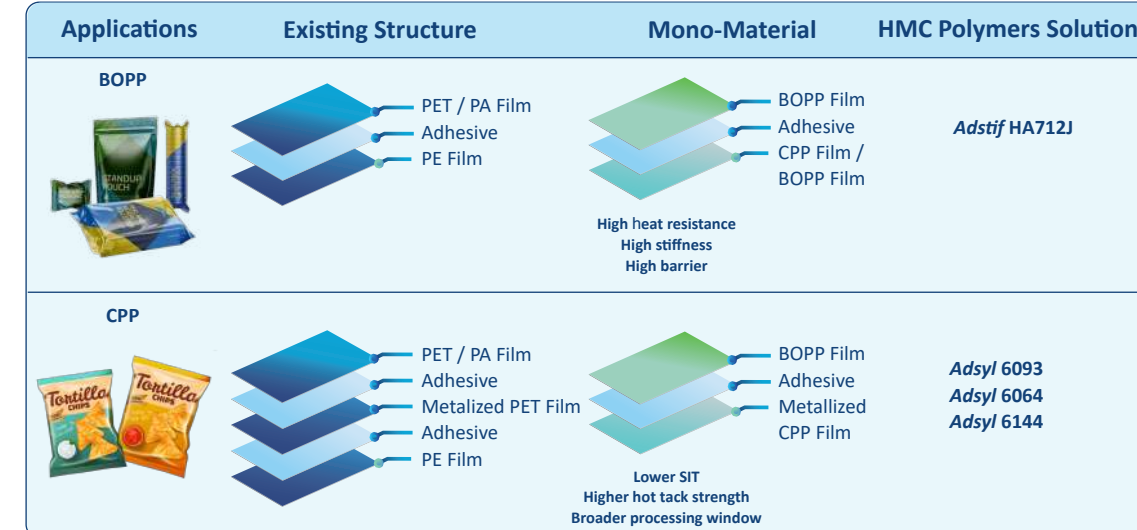
Adstif HA849K

Adstif HA849K is high crystalline homopolymers PP with very high stiffness, excellence heat resistance and high clarity for multilayer thermoforming

Key features

- High crystalline homopolymers produced from 5th generation non-phthalate catalyst
- High stiffness enables downgauging and lighter packaging
- Lower cost of transportation due to lighter weight
- High temperature resistance – Suitable for hot fill and microwaveable applications
- High clarity for product visibility
- Excellent processing performance and flexibility of design

Sustainable PP Solution Mono-Material Laminates use of single material to facilitate recycling



Other Applications with mono-material structure



Moplen RP242G
for bottle, cap and label



Moplen RP242G
Moplen RP348N
for tube, shoulder and cap



Moplen EP310D
for PP woven sack and liner

Sustainable PP Solution High heat resistant BOPP for BOPET/BOPA replacement

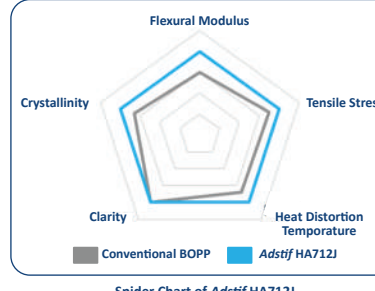
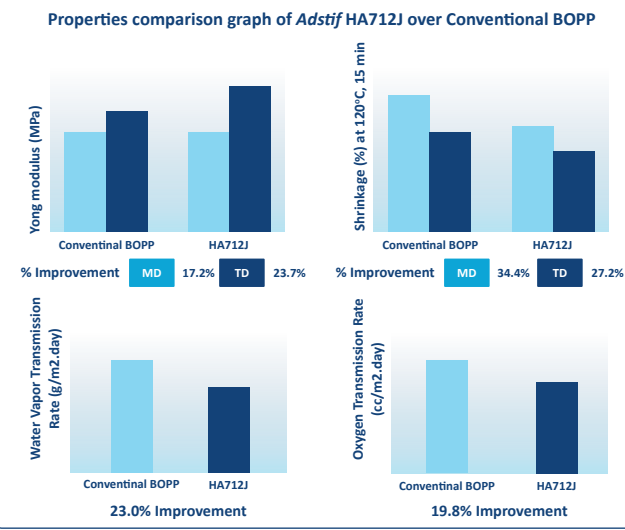
Adstif HA712J

Adstif HA712J is a high-stiffness HOMO Polypropylene with a broad molecular weight distribution and good processability.

Adstif HA712J does not contain slip or anti-block additives and is suitable for metallization.

Key features

- High stiffness
- Good heat resistance
- High barrier properties



Sustainable PP Solution Low SIT Terpolymers for BOPP and CPP films can offer

- Better dimensional stability for laminates on packaging machines.
- Lower sticking to outer BOPP layer in monomaterial laminates.

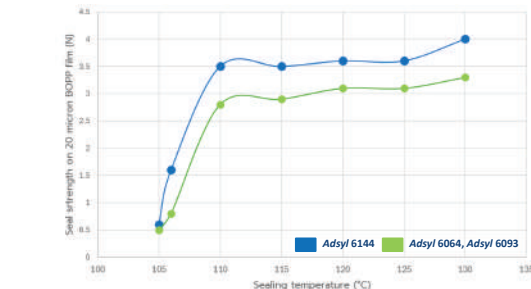
Adstif 6064 and Adstif 6093

Adstif 6064 and Adstif 6093 are Terpolymers PP resins for low SIT ~ 108 °C

- Adstif 6064 does not contain slip or anti-block additives and calcium stearate.
- Adstif 6093 is free of Calcium stearate and contains antiblock additives.

Key features

- Low SIT ~ 107-110°C
- Good sealing performance
- High transparency and gloss
- Broad processing window
- Suitable for metallizable films



Adstif 6144

Adstif 6144 is Terpolymers PP resin with improved SIT at 105°C and does not contain slip or anti-block additives and calcium stearate.

Key features

- Low SIT ~ 105 °C
- Good sealing performance
- Improved film surface solidification
- Good processing performance
- Good transparency and glossiness

Item	Test Method	Adstif 6093	Adstif 6064	Adstif 6144
MDK @ 2.16 kg (g/10min)	ASTM D1238	6.5	5.5	5.5
Tensile strength at yield (MPa)	ASTM D638	23	23	23
Flexural Modulus (MPa)	ASTM D790A	730	730	750
Food Impact Strength (J/m)	ASTM D256A	50	50	55
HDT @ 455 kPa (°C)	ASTM D648	80	75	71
SIT (°C)	Baseil method	108	108	105
Additive Package		antiblock	barefoot	barefoot
HMC Polymers solution for	-	Sealant layer		

Properties comparison of HMC Polymers solution for flexible packaging

Throughout its history, HMC Polymers Company Limited, the 1st and leading producer and distributor of Polypropylene (PP) plastic resins in Southeast Asia, has been dedicated to advancing its business through cutting-edge innovation with a foundation of sustainability.

Our sustainable PP product offers top-notch quality and empowers you to be a part of the solution for a more sustainable and eco-conscious world.



Circular Economy & Waste Management



Carbon Footprint Reduction



Less Fossil-Based Raw Material Used



Certified Sustainable PP with High Quality

ISCC Plus for Bio-Circular & Advance recycling PP and Global Recycled Standard (GRS) for Mechanical recycling PP



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