



# HOME APPLIANCES



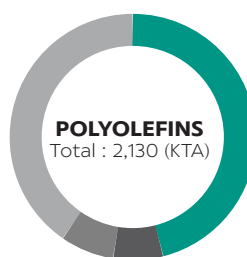
## About SCG Chemicals or SCGC

SCG Chemicals or SCGC is one of the leader in sustainable chemical innovations and manufacturing in Thailand and ASEAN that offers a full range of petrochemical products ranging from upstream production of olefins to downstream production of 3 main plastics resins: polyethylene, polypropylene, and polyvinyl chloride including finished products.

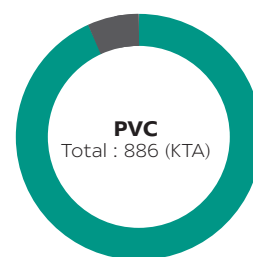
SCGC is committed to conducting business in line with Environmental, Social, and Governance (ESG) and achieving Sustainable Development Goals (SDGs). SCGC is developing new technology and innovation to create high value added products (HVA) and holistic service solutions concerning growing areas such as circular economy, medical & healthcare, and electric vehicle (EV) to better meet diverse places and emphasis demands sustainable environmental stewardship.

### OUR PRODUCTION CAPACITY (AS OF 2021)

**TOTAL CAPACITY : 3,016 KTA** (PE / PP / PVC)



HDPE **980 KTA**  
LLDPE **140 KTA**  
LDPE **150 KTA**  
PP **860 KTA**



PVC **850 KTA**  
PVC Paste **36 KTA**

## ESG Strategic Directions



**“INNOVATION THAT’S REAL”**





# HOME APPLIANCES

## For Health and Well-Being

**SCGC™ PP resins are designed to deliver innovative material solutions for manufacturers of home appliances by exhibiting the highest qualities of durability, safety, and ability to be easily recycled.**

Rapid urbanization and technological advances have led to tremendous transformations in people's lifestyles. Most of us now live increasingly demanding and fast-paced lives that force us to seek comfort and convenience where we can, especially at home.

Home appliances, designed to lighten our load, are becoming more and more robust, durable, and energy-efficient. At the same time, production of home appliances must upkeep heightened standards of health and safety whilst considering environmental issues. In this context, material selection becomes a crucial factor in home appliances production.

At SCGC, we completely understand these intricate demands and changing requirements. Our SCGC™ PP,

high-quality polypropylene resins, are designed to deliver innovative material solutions for manufacturers of home appliances. As an industry leader in petrochemical productions, our efficient and sustainable operations ensure that SCGC™ PP exhibits the highest qualities of durability and safety. In addition, SCGC™ PP is easily recycled thus it is the ideal alternative material for producing high-performance parts for end products that are also aesthetically pleasing and environmentally friendly.

With sustainability at the core of our business, SCGC is passionately committed to improving people's lives and protecting the world for future generations.

### Design for Sustainability

3 GOOD HEALTH AND WELL-BEING



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION





## SCGC™ PP: PP Block Copolymer Resins

SCGC™ PP offers the PP block copolymer resins which provide excellent stiffness and impact balance, suitable for developing parts that need to achieve heightened standards of health and well-being such as parts used in washing machines, refrigerators, dish washers, vacuum cleaners, and other small appliances.

GRADE	P440J	P441JU	P640J	P642J	P686J
<b>Melt flow rate</b> [g/10min] ASTM D1238 at 230°C, 2.16 kg	5	5	10	10	10
<b>Flexural modulus</b> [kg/cm <sup>2</sup> ] ASTM D790	12,500	12,500	12,000	14,000	13,500
<b>Notched Izod Impact at 23°C</b> [J/m] ASTM D256	118	118	98	98	120
<b>Notched Izod Impact at 0°C</b> [J/m] ASTM D256	65	65	59	59	80
<b>Notched Izod Impact at -20°C</b> [J/m] ASTM D256	49	49	39	39	50
<b>Heat deflection temperature</b> [°C] ASTM D648 at 4.6 kg/cm <sup>3</sup>	100	100	105	110	115
<b>Regulation standards</b>	RoHS, REACH, FDA UL94 HB	RoHS, REACH, UL94 HB	RoHS, REACH, FDA UL94 HB	RoHS, REACH, UL94 HB	RoHS, REACH, FDA
<b>Key characteristics</b>	General purpose	UV and anti-static agents	General-purpose	UV and anti-static agents	- High strength - High stiffness - Good processability
<b>Recommended applications</b>	- Washing machines - Refrigerators /freezers	- Washing machines - Refrigerators /freezers	- Washing machines - Refrigerators /freezers	- Washing machines - Refrigerators /freezers	Washing machine pulsators



## SCGC™ PP: PP Block Copolymer Resins

SCGC™ PP offers the PP block copolymer resins, which provide excellent stiffness and impact balance, suitable for developing parts that need to achieve heightened standards of health and well-being such as parts used in washing machines, refrigerators, dish washers, vacuum cleaners, and other small appliances.

GRADE	P740J	P744J	P840J	P841J	P842J	P945J
<b>Melt flow rate</b> [g/10min] ASTM D1238 at 230°C, 2.16 kg	27	30	43	40	40	65
<b>Flexural modulus</b> [kg/cm <sup>2</sup> ] ASTM D790	12,500	14,500	12,500	12,000	14,500	14,000
<b>Notched Izod Impact at 23°C</b> [J/m] ASTM D256	78	78	70	70	74	65
<b>Notched Izod Impact at 0°C</b> [J/m] ASTM D256	49	55	39	39	49	35
<b>Notched Izod Impact at -20°C</b> [J/m] ASTM D256	39	41	30	30	30	29
<b>Heat deflection temperature</b> [°C] ASTM D648 at 4.6 kg/cm <sup>3</sup>	110	115	110	110	120	110
<b>Regulation standards</b>	RoHS, REACH, FDA UL94 HB	RoHS, REACH, FDA UL94 HB, UL 2157	RoHS, REACH, FDA UL94 HB	RoHS, REACH, UL94 HB	RoHS, REACH, FDA UL94 HB	RoHS, REACH, FDA
<b>Key characteristics</b>	General-purpose	- High flexural modulus - Fast cycle time	High flowability	UV and anti-static agents	- High flexural modulus - Fast cycle time	- High flowability - Fast cycle time
<b>Recommended applications</b>	- Washing machines - Refrigerators /freezers - Dish washers - Air conditioners	- Washing machines - Refrigerators /freezers - Dish washers - Air conditioners	- Washing machines - Refrigerators /freezers - Dish washers - Air conditioners	- Washing machines - Refrigerators /freezers - Dish washers - Air conditioners	- Washing machines - Refrigerators /freezers - Dish washers - Air conditioners	- Washing machines



## SCGC™ PP: PP Homopolymer Resins

SCGC™ PP offers the PP homopolymer resins which provide excellent stiffness, suitable for use in home appliance parts and base compound resins.

GRADE	P700J	P702J
<b>Melt flow rate</b> [g/10min] ASTM D1238 at 230°C, 2.16 kg	12	12
<b>Flexural modulus</b> [kg/cm <sup>2</sup> ] ASTM D790	14,500	17,000
<b>Notched Izod Impact at 23°C</b> [J/m] ASTM D256	37	34
<b>Notched Izod Impact at 0°C</b> [J/m] ASTM D256	20	20
<b>Heat deflection temperature</b> [°C] ASTM D648 at 4.6 kg/cm <sup>3</sup>	110	115
<b>Regulation standards</b>	RoHS, REACH, FDA UL94 HB	RoHS, REACH, FDA
<b>Key characteristics</b>	Good rigidity	High rigidity
<b>Recommended applications</b>	- Washing machines - Small appliances - Base resin for compounds	- Washing machines - Small appliances - Base resin for compounds



## SCGC™ PP: PP Random Copolymer Resins

SCGC™ PP offers the PP Random Copolymer resins which provide a high degree of transparency.

GRADE	P750J	P851JO
<b>Melt flow rate</b> [g/10min] ASTM D1238 at 230°C, 2.16 kg	12	20
<b>Flexural modulus</b> [kg/cm <sup>2</sup> ] ASTM D790	12,000	12,500
<b>Notched Izod Impact at 23°C</b> [J/m] ASTM D256	65	60
<b>Notched Izod Impact at 0°C</b> [J/m] ASTM D256	39	39
<b>Heat deflection temperature</b> [°C] ASTM D648 at 4.6 kg/cm <sup>3</sup>	90	100
<b>Regulation standards</b>	RoHS, REACH, FDA UL94 HB	RoHS, REACH, FDA UL94 HB
<b>Key characteristics</b>	Transparent	High clarity
<b>Recommended applications</b>	- Washing machines - Refrigerators/freezers	- Washing machines - Refrigerators/freezers



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- It is the customers' responsibility to inspect and test our products in order to satisfy oneself as to the suitability of the products for the customers' particular purpose. The customer is responsible for the appropriate, safe, legal, processing, and handling of our products.
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