



RIGID
PACKAGING



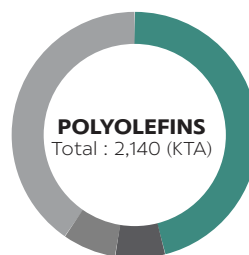
About SCG Chemicals or SCGC

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.

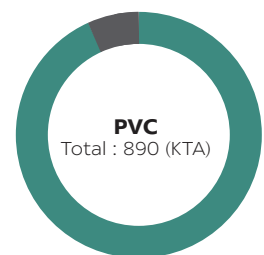
SCGC is committed to conducting business in line with Environmental, Social, and Governance (ESG) and achieving Sustainable Development Goals (SDGs). SCGC is developing new technology and innovation to create high value added products (HVA) and holistic service solutions concerning growing areas such 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 2025)

TOTAL CAPACITY : 3,030 KTA (PE / PP / PVC)



HDPE	980 KTA
LLDPE	140 KTA
LDPE	160 KTA
PP	860 KTA



PVC	850 KTA
PVC Paste	40 KTA

ESG Strategic Directions



“INNOVATION THAT’S REAL”





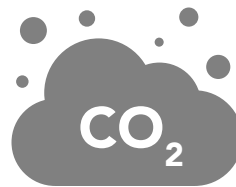
SCGC™ HDPE

For Carbonated Soft Drink and Sparkling Water Caps & Closures

SX002J and SX002JA for Sustainable Food & Beverage Packaging



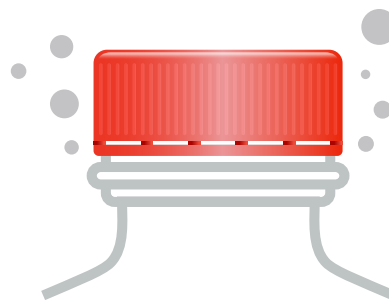
Up to 28%
less plastic use



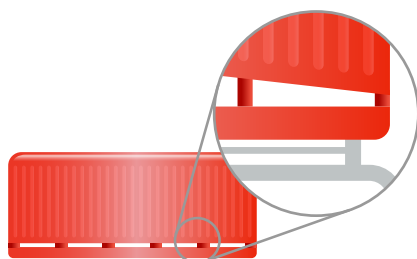
Reduces at least 224 kg of CO₂ emissions
for every ton of plastic consumed



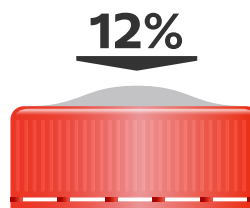
Superior stress cracking resistance



Better gas retention (10%)



Higher bridge strength (15%)



Less doming (12%)

Reference resin: SCGC Bi-modal HDPE for Carbonated Soft Drink and Sparkling Water Caps & Closures



SCGC™ HDPE

For Carbonated Soft Drink and Sparkling Water Caps & Closures

GRADE	SX002J	SX002JA
Melt flow rate (MFR) at 190°C, 2.16kg (g/10min) ISO 1133		0.55
Density (g/cm ³) ISO 1183-2		0.955
Tensile modulus (MPa) ISO 527 (1B, Speed 1 mm/min)		1,000
Charpy impact strength (kJ/m ²) ISO 179 @ 23°C		8
Environmental stress cracking resistance (ESCR), F50, 10% Igepal (hr) ASTM D1693		>1,000
Slip agents	✓	-
Key characteristics	<ul style="list-style-type: none"> - Superior Environmental Stress Cracking Resistance (ESCR) - Excellent balance of stiffness and toughness - Good organoleptic property 	
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 	
Recommended processes	<ul style="list-style-type: none"> - Injection molding - Continuous compression molding 	
Recommended applications	<ul style="list-style-type: none"> - Carbonated soft drink and sparkling water for lightweight closure - Hot fill and aseptic beverage closure 	



SCGC™ HDPE: EXCELLENT STRESS CRACKING RESISTANCE For Carbonated Soft Drink and Sparkling Water Caps & Closures

GRADE	H567J	H567JA
Melt flow rate (MFR) at 190°C, 2.16kg (g/10min) ISO 1133		1
Density (g/cm³) ISO 1183-2	0.952	
Tensile modulus (MPa) ISO 527 (1B, Speed 1 mm/min)	1,010	
Charpy impact strength (kJ/m²) ISO 179 @ 23°C	6	
Environmental stress cracking resistance (ESCR), F50, 10% Igepal (hr) ASTM D1693	> 600	
Slip agents	✓	-
Key characteristics	<ul style="list-style-type: none"> - Excellent Environmental Stress Cracking Resistance (ESCR) - Excellent flowability - Good mechanical and organoleptic properties 	
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 	
Recommended processes	<ul style="list-style-type: none"> - Injection molding - Continuous compression molding 	
Recommended applications	<ul style="list-style-type: none"> - Carbonated soft drink and sparkling water - Hot fill and aseptic beverage closure 	



SCGC™ PP: BLOCK COPOLYMER

For Carbonated Soft Drink and Hot-Filled Beverage Caps & Closures

GRADE	P443J
Melt flow rate (MFR) at 230°C, 2.16kg (g/10min) ASTM D1238	6
Flexural modulus (kg/cm ²) ASTM D790	15,000
Notched Izod Impact at 23°C (J/m) ASTM D256	110
Tensile strength at yield (kg/cm ²) ASTM D638	290
HDT (°C) ASTM D648	120
Slip agents	✓
Key characteristics	<ul style="list-style-type: none"> - Excellent processability - High stiffness - High heat resistance
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011
Recommended processes	<ul style="list-style-type: none"> - Injection molding - Continuous compression molding
Recommended applications	<ul style="list-style-type: none"> - Carbonated soft drink closure - Hot-filled beverage closure



SCGC™ HDPE: ORGANOLEPTIC For Still & Mineral Water and Hot-Filled Beverage Caps & Closures

GRADE	H355JA	H455JA
Melt flow rate (MFR) at 190°C, 2.16kg (g/10min) ASTM D1238	7.5	4.5
Density (g/cm³) ASTM D1505	0.961	0.958
Flexural modulus (kg/cm²) ASTM D790	13,500	12,500
Notched Izod Impact at 23°C (J/m) ASTM D256	33	39
Environmental stress cracking resistance (ESCR), F50, 10% Igepal (hr) ASTM D1693	6	7
Slip agents	-	-
Key characteristics	<ul style="list-style-type: none"> - Excellent processability - High stiffness - Excellent organoleptic property 	<ul style="list-style-type: none"> - Good processability - High stiffness - Excellent organoleptic property
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 	
Recommended processes	<ul style="list-style-type: none"> - Injection molding - Continuous compression molding 	
Recommended applications	<ul style="list-style-type: none"> - Still & mineral water closure - Hot-filled beverage closure - Aseptic beverage closure 	



SCGC™ HDPE

For Blow Molding

Food and Beverage Bottles, Personal and Homecare Bottles and Chemical Containers

GRADE	H6430BM	H6140B	H5840B
MFR (g/10min)	0.40	0.30	0.30
Density (g/cm ³)	0.964	0.960	0.955
Flexural modulus (kg/cm ²)	16,000	14,500	13,500
Notched izod impact at 23°C (J/m)	245	98	98
ESCR (hrs, F50)	24	100	300
Key characteristics	<ul style="list-style-type: none"> - Excellent stiffness - Odorless - Recyclability 	<ul style="list-style-type: none"> - Good gloss surface - Good impact strength, while maintaining chemical resistance - Recyclability 	<ul style="list-style-type: none"> - Excellent Environmental Stress Crack Resistance - Good surface appearance - Good processability - Good printability - Recyclability
Recommended applications	<ul style="list-style-type: none"> - Food and beverage bottle such as milk, drinking water, and juice bottle 	<ul style="list-style-type: none"> - Food and beverage bottles such as milk, drinking water, and fruit juice bottle 	<ul style="list-style-type: none"> - Brake fluid bottle - Chemical bottle - Lubricant bottle - Homecare bottle

Remark: Small blow application means container that able to contain capacity not over 20 Litres



SCGC™ HDPE

For Blow Molding

Food and Beverage Bottles, Personal and Homecare Bottles and Chemical Containers

GRADE	S414B	S411B	S496B
MFR (g/10min)	0.5	0.22	0.35
Density (g/cm ³)	-	-	0.956
Flexural modulus (kg/cm ²)	16,500	16,500	13,500
Notched izod impact at 23°C (J/m)	90	97	93
ESCR (hrs, F50)	24	100	450
Key characteristics	<ul style="list-style-type: none"> - Good Flowability - Excellent stiffness - Odorless 	<ul style="list-style-type: none"> - Excellent combination of stiffness and chemical resistance - Recyclability 	<ul style="list-style-type: none"> - Excellent chemical resistance - Good Flowability - Recyclability
Recommended applications	<ul style="list-style-type: none"> - Food and beverage bottles such as milk, drinking water, and fruit juice bottle 	<ul style="list-style-type: none"> - Food, Milk and Drink container - Personal and homecare bottles - Cosmetic bottles - Lubricant and Chemical containers 	<ul style="list-style-type: none"> - Chemical bottles - Personal and homecare bottles - Lube oil bottles

Remark: Small blow application means container that able to contain capacity not over 20 Litres



SCGC™ HDPE

For Blow Molding Chemical Containers

GRADE	S521B	S531B
MFR (at 2.16) (g/10min)	0.06	0.03
MFR (at 21.6) (g/10min)	7.5	4.0
Density (g/cm ³)	0.948	0.948
Flexural modulus (kg/cm ²)	8,200	8,500
Notched izod impact at 23°C (J/m)	660	800
ESCR (hrs, F50)	>1,008	>1,008
Key characteristics	<ul style="list-style-type: none"> - Excellent chemical resistance - Good processability - Good process appearance - Good stiffness and impact strength balance 	<ul style="list-style-type: none"> - Excellent chemical resistance - Good processability - Good process appearance - Good stiffness and impact strength balance
Recommended applications	<ul style="list-style-type: none"> - Chemical containers up to 30 liters - Jerrycan - Floating solar pontoon - Floating dock pontoon 	<ul style="list-style-type: none"> - L-Ring drums - Open-top drums



SCGC™ HDPE

For Injection Molding

General Injection Parts

GRADE	H5814J	H5818J	H6105JU
MFR (g/10min)	14.0	18.0	5.0
Density (g/cm ³)	0.958	0.959	0.964
Tensile strength at Yield (kg/cm ²)	280	290	250
Flexural modulus (kg/cm ²)	12,500	13,000	15,500
Notched izod Impact at 23°C (J/m)	29	27	32
Key characteristics	<ul style="list-style-type: none"> - Good processability - Good impact resistance - Food contact applicable 	<ul style="list-style-type: none"> - Good processability - Good impact resistance - Food contact applicable 	<ul style="list-style-type: none"> - Good stiffness and impact resistance - Good processability - UV resistance
Recommended applications	<ul style="list-style-type: none"> - General injection part - Household product - Office article - Bottle cap and closure - Toy 	<ul style="list-style-type: none"> - General injection part - Household product - Bottle cap and closure - Toy 	<ul style="list-style-type: none"> - Large container and garbage bin - Fruit basket - Pallet and crate - Industrial part - Outdoor application



SCGC™ PP: HOMOPOLYMER For Injection Molding

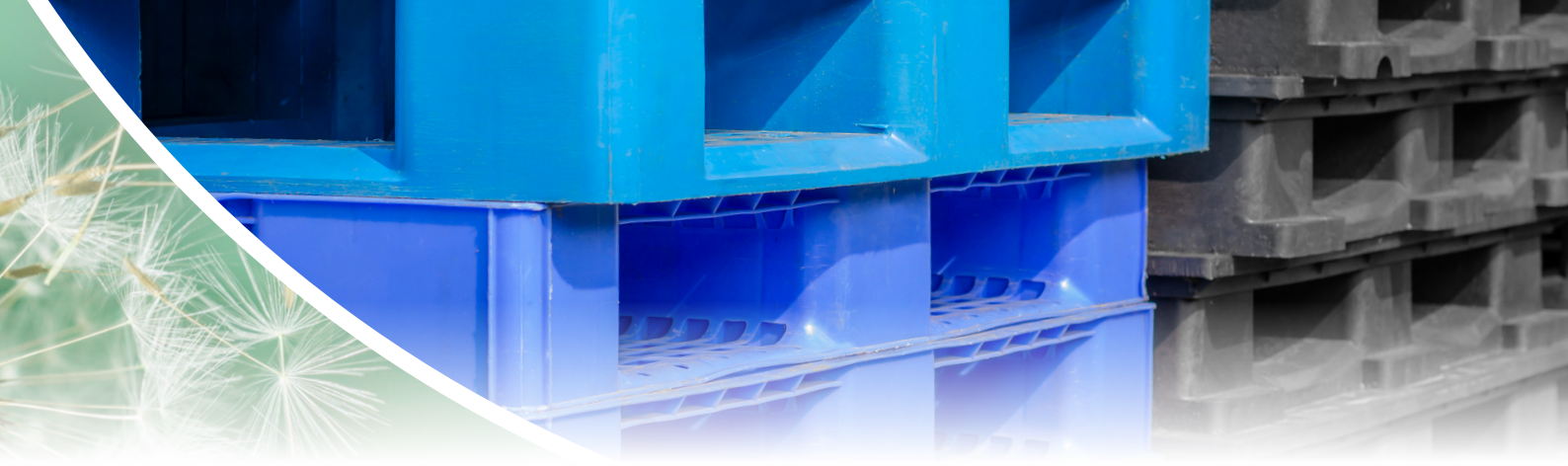
GRADE	P403J	P700J	P701J	P702J
MFR (g/10min)	3.5	12.0	12.0	12.0
Tensile strength at break MD/TD (kg/cm ²)	320	320	350	420
Flexural modulus (kg/cm ²)	13,500	14,500	15,500	17,000
Notched izod Impact at 23°C (J/m)	40	37	34	34
Key characteristics	<ul style="list-style-type: none"> - Good impact resistance - Odorless - Food contact applicable 	<ul style="list-style-type: none"> - Good stiffness - High productivity - Odorless - Food contact applicable 	<ul style="list-style-type: none"> - Excellent stiffness - High productivity - Odorless - Food contact applicable 	<ul style="list-style-type: none"> - Excellent stiffness - Good clarity and gloss - High productivity - Odorless - Food contact safe
Recommended applications	<ul style="list-style-type: none"> - Food container - Fruit basket - Furniture - Household product - Infant product - Office accessory 	<ul style="list-style-type: none"> - Food container - Fruit basket - Household product - Infant product - Office accessory - Toy 	<ul style="list-style-type: none"> - Food container - Fruit basket - Household product - Infant product - Office accessory - Toy 	<ul style="list-style-type: none"> - Food container - Household product - Toy



SCGC™ BLOCK COPOLYMER

For Injection Molding

GRADE	P440J	P441JU	P483JU	P640J
MFR (g/10min)	5.0	5.0	5.0	10.0
Tensile strenght at yield (kg/cm ²)	270	270	300	280
Flexural modulus (kg/cm ²)	12,500	12,500	16,500	12,000
Notched izod Impact at 23°C (J/m)	118	118	108	98
Key characteristics	<ul style="list-style-type: none"> - High impact strength - Good stiffness - Food contact applicable 	<ul style="list-style-type: none"> - High impact strength - Good stiffness - Good UV resistance - Contain anti-static agent 	<ul style="list-style-type: none"> - High impact strength - Excellent stiffness - Good processability - Good dimensional stability - High heat resistance - Good UV resistance - Contained anti-static agent 	<ul style="list-style-type: none"> - High impact strength - Good stiffness - Good processability - Food contact applicable
Recommended applications	<ul style="list-style-type: none"> - Automotive part - Container - Crate - Electrical appliance part - Furniture - Industrial application - Pail 	<ul style="list-style-type: none"> - Automotive part - Crate - Electrical appliance part - Pail - Industrial application - Outdoor application 	<ul style="list-style-type: none"> - Automotive part - Electrical appliance part - Outdoor application - Returnable packaging such as pallet, crate, and container 	<ul style="list-style-type: none"> - Automotive part - Electrical appliance part - Furniture - Industrial application - Toy



SCGC™ BLOCK COPOLYMER

For Injection Molding

GRADE	P642J	P686J	P744J	P840J
MFR (g/10min)	10.0	10.0	30.0	43.0
Tensile strenght at yield (kg/cm ²)	280	290	290	290
Flexural modulus (kg/cm ²)	14,000	13,500	14,500	12,500
Notched izod Impact at 23°C (J/m)	98	120	78	70
Key characteristics	<ul style="list-style-type: none"> - High impact strength - High stiffness - Good flowability - Mechanical property balance - Contain UV stabilizer and anti-static agent 	<ul style="list-style-type: none"> - High impact strength - High stiffness - Good productivity - Food contact applicable 	<ul style="list-style-type: none"> - Good impact strength - High stiffness - High processability 	<ul style="list-style-type: none"> - Good Impact strength - Good stiffness - Good processability - Food contact applicable
Recommended applications	<ul style="list-style-type: none"> - Automotive part - Electrical appliance part - Furniture - Industrial application 	<ul style="list-style-type: none"> - Pail, Crate, Container - Automotive parts - Electrical appliance parts - Industrial parts 	<ul style="list-style-type: none"> - Complicated industrial part - Home appliance part - Household products - Washing machine tub 	<ul style="list-style-type: none"> - Automotive part - Complicated industrial part - Electrical appliance part

SCGC™ BLOCK COPOLYMER

For Injection Molding

GRADE	P740J	P841J	P842J	P945J
MFR (g/10min)	27.0	40.0	40.0	65.0
Tensile strenght at yield (kg/cm ²)	290	260	295	270
Flexural modulus (kg/cm ²)	12,500	12,000	14,500	14,000
Notched izod Impact at 23°C (J/m)	78	70	74	65
Key characteristics	<ul style="list-style-type: none"> - Good impact strength - Good stiffness - Good processability - Food contact applicable 	<ul style="list-style-type: none"> - Good impact strength - Good stiffness - Good processability - Good UV resistance 	<ul style="list-style-type: none"> - Good impact strength - High stiffness - Dimensional stability - Food contact safe 	<ul style="list-style-type: none"> - High impact strength - High stiffness - High process ability - Food contact applicable
Recommended applications	<ul style="list-style-type: none"> - Automotive part - Complicated industrial part - Electrical appliance part 	<ul style="list-style-type: none"> - Electrical appliance parts such as washing machine tub, base, panel, etc. - Industrial application 	<ul style="list-style-type: none"> - Electrical appliance parts such as refrigerator part and washing machine tub, base, panel, etc. - Industrial application 	<ul style="list-style-type: none"> - Household products - Complicated industrial parts - Any parts require good flowability



SCGC™ PP: RANDOM COPOLYMER HIGH TRANSPARENCY For Injection Molding

GRADE	P750J	P951J
MFR (g/10min)	12.0	28.0
Tensile strength at yield (kg/cm ²)	300	300
Flexural modulus (kg/cm ²)	12,000	12,000
Notched izod impact at 23°C (J/m)	65	50
Key characteristics	<ul style="list-style-type: none"> - High gloss and clarity - Good impact resistance - Odorless - Food contact applicable 	<ul style="list-style-type: none"> - High clarity - High flowability - Food contact applicable
Recommended applications	<ul style="list-style-type: none"> - Transparent food container - Transparent household product 	<ul style="list-style-type: none"> - Transparent food container - Transparent household product - Article that requires high transparency



SCGC™ PP: HOMOPOLYMER

For Thin Wall Injection Molding

Food Packaging

GRADE	P904J	P905J
Melt flow rate (MFR) at 230°C, 2.16kg (g/10min) ASTM D1238	75	65
Flexural modulus (kg/cm ²) ASTM D790	16,500	17,000
Notched Izod Impact at 23°C (J/m) ASTM D256	38	32
HDT at 4.6 kg/cm² (°C) ASTM D648	121	100
Haze 1 mm (%) ASTM D1003	43	20
Key characteristics	<ul style="list-style-type: none"> - High flowability - High clarity - Good stiffness and toughness balance - Microwavable or hot fillable 	<ul style="list-style-type: none"> - Outstanding transparency - High flowability - Good stiffness and toughness balance
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 	
Recommended applications	<ul style="list-style-type: none"> - Drinking cup - Food container - Household product 	



SCGC™ PP: HOMOPOLYMER For Thermoformed Food Packaging

GRADE	P304S	P303S	P105S
Melt flow rate (MFR) at 230°C, 2.16kg (g/10min) ASTM D1238	2.1	2.3	0.5
Flexural modulus (kg/cm ²) ASTM D790	13,500	19,000	18,000
Notched Izod Impact at 23°C (J/m) ASTM D256	6	59	120
HDT at 4.6 kg/cm² (°C) ASTM D648	110	128	110
Key characteristics	<ul style="list-style-type: none"> - Good stiffness and toughness - Good clarity - Microwavable or hot fillable 	<ul style="list-style-type: none"> - High stiffness - High clarity - Microwavable or hot fillable 	<ul style="list-style-type: none"> - High melt strength - High stiffness - Low sagging - Specially designed for vacuum thermoforming
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 		
Recommended applications	<ul style="list-style-type: none"> - Food tray - Food container - Disposal drink cup 		



SCGC™ PP: HETEROPHASIC POLYPROPYLENE For Thermoformed Frozen to Microwavable Food Packaging

GRADE	P348S	P140S
Melt flow rate (MFR) at 230°C, 2.16kg (g/10min) ASTM D1238	2.8	0.7
Density (g/cm ³) ASTM D1505	0.963	0.910
Flexural modulus (kg/cm ²) ASTM D790	20,500	12,600
Notched Izod Impact at 23°C (J/m) ASTM D256	34	No break
HDT at 4.6 kg/cm² (°C) ASTM D648	130	95
Key characteristics	<ul style="list-style-type: none"> - Excellent thermal stability and high stiffness - High impact strength at low temperature - Microwavable or hot fillable 	<ul style="list-style-type: none"> - Superior impact strength - Balance stiffness - Dimension stability - Specially designed for vacuum thermoforming
International compliance standards	<ul style="list-style-type: none"> - U.S. FDA 21 CFR 177.1520 - Commission Regulation (EU) no. 10/2011 	
Recommended applications	<ul style="list-style-type: none"> - Food tray - Food container 	



SCGC™ RANDOM COPOLYMER

For Blow Molding

GRADE	P250B
MFR (at 2.16 kg) (g/10min)	13
Density (g/cm ³)	0.91
Flexural modulus (kg/cm ²)	9,200
Notched izod impact at 23°C (J/m)	No break
Heat Distortion Temperature (ASTM 648 @4.6 kg/cm ³) (°C)	80
Key characteristics	<ul style="list-style-type: none"> - Excellent toughness - High clarity - Good processability
Recommended applications	<ul style="list-style-type: none"> - Personal homecare bottles - Cosmetic bottles - Food packaging - Sheet for thermoforming



SCGC™ HDPE

For Monofilament and Flat Yarn Application

GRADE	H5480S
MFR (g/10min)	0.8
Density (g/cm ³)	0.952
Flexural modulus (kg/cm ²)	10,000
Notched izod impact at 23°C (J/m)	167
Key characteristics	<ul style="list-style-type: none"> - Good processability - High tenacity - Good product appearance
Recommended applications	<ul style="list-style-type: none"> - Agriculture net - Fishing net - Rope - Tarpulin - Sun shading - Woven sack



SCGC™ PP: HOMOPOLYMER For Monofilament and Flat Yarn Application

GRADE	P400S	P401S	P607F
MFR (g/10min)	3.5	2.5	7.0
Tensile strength at yield (kg/cm ²)	350	350	350
Flexural modulus (kg/cm ²)	15,500	15,500	13,450
Notched izod impact at 23°C (J/m)	40	41	33
Key characteristics	<ul style="list-style-type: none"> - Good processability - High productivity - Good mechanical properties - Food contact applicable 	<ul style="list-style-type: none"> - Excellent mechanical properties - Good processability - Food contact applicable 	<ul style="list-style-type: none"> - Good stiffness and impact balance for durable woven products - High productivity - Safe for food contact packaging - Excellent stretch ability - Proven compatibility with high speed tape line
Recommended applications	<ul style="list-style-type: none"> - Flexible Intermediate Bulk Container (FIBC) - Rope & twine - Sheet - Stap - Straw - Woven sack 	<ul style="list-style-type: none"> - Rope - Sheet and thermoforming - Strap band - Straw - Woven sack such as Flexible Intermediate Bulk Container (FIBC), jumbo bag, and industrial woven sack 	<ul style="list-style-type: none"> - High speed PP tape for woven bag



SCGC™ PP: RANDOM COPOLYMER

For Coating Application Monofilament and Flat Yarn Application

GRADE	P838C	P791C
MFR (g/10min)	28.0	22.0
Tensile strength at yield (kg/cm ²)	280	202
Flexural modulus (kg/cm ²)	11,000	7,885
Vicat temperature (°C)	140	125
Key characteristics	<ul style="list-style-type: none"> - Good processability - Good adhesion on substrate - Balanced stiffness and impact strength 	<ul style="list-style-type: none"> - Superior bonding strength to both BOPP and PP woven - Stable processing & less neck in - Enhance impact strength & product flexibility - Able to run at wide range of coating speed 30 – 250 m/min
Recommended applications	<ul style="list-style-type: none"> - Tarpaulin coating - PP woven bag coating - PP woven bag lamination with other substrate such as BOPP film, paper, metalized film 	<ul style="list-style-type: none"> - Intermediate Bulk Containers (FIBC) - Tarpaulin - BOPP or paper lamination with PP woven bags



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Disclaimer:

- The applications specified for reference only.
- It is customer's responsibilities to inspect and test the product for suitability of the customer's own use and purpose.
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