SCGC

PVC RESIN

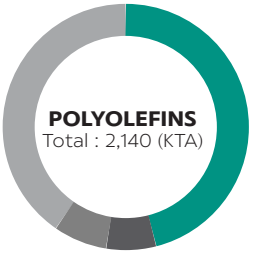
About SCG Chemicals or SCGC

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.

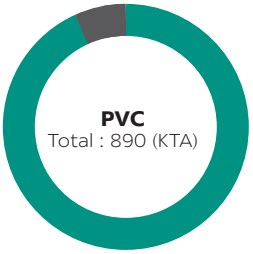
SCGC is committed to conducting business in line with Environmental, Social, and Governance (ESG) and achieving Sustainable Development Goals (SDGs). SCGC is developing new technology and innovation to create high value added products (HVA) and holistic service solutions concerning growing areas such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

PVC RESIN

SCGC™ PVC Suspension resin has a high product variety, enabling better manufacturing productivity and less defects for product variety with full range of K-Value, which contributes to energy and resource efficiency for a better world.

With sustainability becoming a trending topic worldwide, both manufacturers and consumers have become ever more adamant about looking for products that are not only durable and safe, but also environmentally friendly.

To this end, the use of polyvinyl chloride (PVC) resins has come to public attention, especially since its adaptive properties and processability are used to produce a wide variety of products.

Proactive on such environmental concerns, as an industry leader, SCGC has developed SCGC™ PVC resin made with an advanced suspension polymerization process, making it completely recyclable and environmentally friendly. SCGC™ PVC resin come in various molecular weights, or 'K values,' suitable for use as raw materials in a wide range of production processes. Manufacturers can choose from a variety of grades of SCGC™ PVC resin with different K values and select suitable additives to be added to the mix to satisfy their specific requirements and safety standards. These high-quality, recyclable resin have high purity, enabling better manufacturing productivity and less defects for a variety of products, which contributes to energy and resource efficiency for a better world.

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

PVC RESIN:
MEDICAL SERIES

SM58S/SM61S	
Characteristics	- Excellent thermal stability - Low content of impurities
Applications	- Rigid and semi-rigid medical sheet - Molded medical devices such as connector, wing, cap, chamber etc.

SM66E/SM71S	
Characteristics	- Good thermal stability - Low content of impurities - Very low fish eye - Odorless - Good mechanical performance
Applications	- Flexible medical film and sheet - Flexible medical devices such as nasal tube, blood tube, and blood bag

SM76E/SM80S/SM84E	
Characteristics	- Good thermal stability - Low content of impurities - Very low fish eye - Excellent mechanical performance
Applications	- Flexible medical film and sheet - Flexible medical devices such as main tube, pump tube, and blood bag

SPECIAL GRADES PVC RESIN
Medical Series

Our medical series PVC resin is exclusively produced by suspension polymerization process, white powder and free-flowing resin, good processability, good thermal stability, low content of impurites, very low fish eye, complied with many international standards of safety and compounded with other additives by special mixing techniques suitable for medical purposeapplications used.

	Rigid Applications	
GRADE	**SM58S**	**SM61S**
Recommended applications	- Rigid and semi-rigid medical sheet - Molded medical devices such as connector wing,cap,chamber etc.	
K Value [-]	58.3*	61.3**
Apparent bulk density [g/ml]	0.59	0.58
Volatile matter [%]	0.1	0.1
Sieve analysis, retained on 250 microns [%]	0.6	0
Sieve analysis, retained on 75 microns [%]	91.5	95.8
Impurity and foreign matter [Points/100g]	2	1
Residual vinyl choride monomer [ppm]	0.4	0.3
Fisheye [Point/150 cm^2]	4	3
Elution test [-]	Passed	Passed
Key characteristics	- Excellent thermal stability - Low content of impurities	- Good thermal stability - Low content of impurities

Remark: Typical value only
* Corresponding Polymerization Degree = 700
** Corresponding Polymerization Degree = 800

SPECIAL GRADES PVC RESIN
Medical Series

	Soft Applications	
GRADE	**SM66E**	**SM71S**
Recommended applications	- Flexible medical film and sheet - Flexible medical devices such as nasal tube, blood tube and blood bag	
K Value [-]	66.2*	71.6**
Apparent bulk density [g/ml]	0.54	0.51
Volatile matter [%]	0.1	0.1
Sieve analysis, retained on 250 microns [%]	0.2	0.3
Sieve analysis, retained on 75 microns [%]	98.6	98.4
Impurity and foreign matter [Points/100g]	2	1
Residual Vinyl Choride Monomer [ppm]	0.3	0.1
Fisheye [Point/150 cm^2]	1	3
Elution test [-]	Passed	Passed
Key characteristics	- Good thermal stability - Low content of impurities - Very low fisheye	- Good thermal stability - Low content of impurities - Very low fisheye - Odorless - Good mechanical performance

Remark: Typical value only
* Corresponding Polymerization Degree = 1,000
** Corresponding Polymerization Degree = 1,300

SPECIAL GRADES PVC RESIN
Medical Series

	Soft Applications		
GRADE	**SM76E**	**SM80S**	**SM84E**
Recommended applications	- Flexible medical flims and sheets - Flexible medical devices such as blood tube, main tube and blood bag	- Flexible medical flim and sheet - Flexible medical devices such as blood tube, main tube, pump tube and blood bag	
K value [-]	76.7*	79.2**	85.1***
Apparent bulk density [g/ml]	0.47	0.48	0.48
Volatile matter [%]	0.1	0.1	0.1
Sleve analysis, retained at 250 microns [%]	0	0.1	0
Sleve analysis, retained at 75 microns [%]	97.1	98.4	97.8
Impurities and foreign matter [Points/100g]	1	2	1
Residual vinyl choride monomer [ppm]	0	0.2	0
Fisheye [Point/150 cm^2]	1	2	1
Elution test [-]	Passed	Passed	Passed
Key characteristics	- Good thermal stability - Low content of impurites - Very low fisheye - Excellent mechanical performance		

Remark: Typical value only
* Corresponding Polymerization Degree = 1,700
** Corresponding Polymerization Degree = 2,000
*** Corresponding Polymerization Degree = 2,500

SPECIAL GRADES PVC RESIN
C PVC SERIES

Our C PVCM-series PVC resin is specially designed for CPVC production. Made through suspension polymerization, it delivers high porosity, high bulk density, and excellent purity. With strong thermal stability and initial coloration, suitable for produce CPVC with smooth processing, superior product performance and consistent quality.

	Rigid Applications	
GRADE	**SF58S**	**SG66J**
Recommended applications	- PVC resin for use in producing C PVC resin for hot water fitting, industrial fitting, fire sprinter fitting, and housing power cable fitting	- PVC resin for use in producing C PVC resin for hot water pipe, industiral pipe, fire sprinter pipe and housing power cable pipe
K value [-]	57.5*	66.1**
Apparent bulk density [g/ml]	0.56	0.56
Volatile matter [%]	0.1	0.1
Sleve analysis, retained at 250 microns [%]	0.1	0.1
Sleve analysis, retained at 75 microns [%]	97.8	98.5
Impurities and foreign matter [Points/100g]	0	1
Residual vinyl choride monomer [ppm]	0.5	0.3
Key characteristics	- High Porosity - Good initial coloration - Excellent thermal stability - Low content of impurities	- High bulk density - High Porosity - Good initial coloration - Good thermal stability - Low content of impurities

Remark: Typical value only
* Corresponding Polymerization Degree = 700
** Corresponding Polymerization Degree = 1,000

SPECIAL GRADES PVC RESIN
Low & High K Value Series

Our PVC resins with low K values exhibit faster fusion behavior, a high melt flow rate (MFR), and low contamination levels. High K value PVC resins exhibit excellent plasticizer absorption, drying abilities, high strength and elasticity, and excellent mechanical performance in finished products.

	Rigid Applications	Soft Applications
GRADE	**SG500**	**SG730**
Recommended applications	- Rigid injection product - Fitting - Floor tile - Adhesive	- Flexible & transparent sheet - Wire harness - High strength wire & cable - Automotive parts - High strength hose
K Value [-]	48.6*	73.8**
Apparent bulk density [g/ml]	0.59	0.49
Volatile matter [%]	0.2	0.1
Sieve analysis, retained on 250 microns [%]	0.4	0
Sieve analysis, retained on 75 microns [%]	97.1	96.0
Impurity and foreign matter [Points/100g]	1	6
Residual vinyl choride monomer [ppm]	0.3	0.1
Fisheye [Point/150 cm^2]	4	2
Elution test [-]	-	4.6×10^{13}
Key characteristics	- Excellent Flowabilities - Excellent fusion properties - Excellent processability - Good thermal stability	- Good maechanical performance - Good plasticizer absorption - Good electrical properties - Good thermal Stability

Remark: Typical value only
* Corresponding Polymerization Degree = 400
** Corresponding Polymerization Degree = 1,400

SPECIAL GRADES PVC RESIN
Low & High K Value Series

	Soft Applications		
GRADE	**SG760**	**SG800**	**SG840**
Recommended applications	- Products requiring high strength and thermal stability such as wire and cable, wire harnesses and electrical tape - Products requiring strong flexible sheets such as mat, cover, flexible sheet packing, artificial leather and inflatable toy - Product requiring high strength, abrasive resistance and flexibility such as automotive part, hose and shoe - Product requiring high elasticity such as loop, sandal, gear knob and brushe		
K Value [-]	76.6*	79.2**	85.1***
Apparent bulk density [g/ml]	0.47	0.48	0.48
Volatile matter [%]	0.1	0.1	0.1
Sieve analysis, retained on 250 microns [%]	0	0.1	0
Sieve analysis, retained on 75 microns [%]	97.5	98.4	97.8
Impurity and foreign matter [Points/100g]	3	2	1
Residual vinyl choride monomer [ppm]	0	0.2	0
Fisheye [Point/150 cm^2]	1	2	1
Elution test [-]	4.7×10^{13}	4.1×10^{13}	4.3×10^{13}
Key characteristics	- Excellent mechanical performance - Excellent plasticizer absorption and drying abilities - Good electrical resistance - Good thermal stability - Low fisheye - Low content of impurities	- Excellent mechanical performance - Excellent plasticizer absorption and drying abilities - Long-term resistance to high and low temperatures - Improve fatigue and abrasion resistance - Low compession setting - Rubber-like elasticity - Good electrical resistance - Good thermal Stability - Low fisheye - Low content of impurities	

Remark: Typical value only
** Corresponding Polymerization Degree = 1,700*
*** Corresponding Polymerization Degree = 2,000*
**** Corresponding Polymerization Degree = 2,500*

SPECIAL GRADES PVC RESIN
Refine Appearance Series

Our refine appearance PVC resins have extremely low fisheye counts, excellent initial colorations, good thermal stability, high transparency, and low contamination levels.

	Soft Applications	
GRADE	**SG66Z**	**SG71Z**
Recommended applications	- Flexible sheet packaging - Sticker and decorative sheet - Shrink film - Wire harness - Electrical wire and cable - Soft-touch extrusion profile	- Flexible sheet packaging - Wire harness - Automotive part - Electrical wire and cable - Electrical tape - Soft-touch extrusion profile - Gasket
K value [-]	66.2*	71.6**
Apparent bulk density [g/ml]	0.54	0.51
Volatile matter [%]	0.1	0.1
Sleve analysis, retained at 250 microns [%]	0.2	0.3
Sleve analysis, retained at 75 microns [%]	98.6	98.4
Impurities and foreign matter [Points/100g]	2	1
Residual vinyl chloride monomer [ppm]	0.3	0.1
Fisheye-severe condition [Point/150 cm^2]	3	3
Volume resistivity [Ohm-cm]	4.4×10^{13}	4.5×10^{13}
Key characteristics	- Excellent plasticizer aborption and drying abilities - Very low fisheye - Low content of impurities - Good initial coloration - Good eletrical resistance - Good thermal stability	- Excellent plasticizer aborption and drying abilities - Good mechanical performance - Very low fisheye - Low content of impurities - Good initial coloration - Good eletrical resistance - Good thernal stability

Remark: Typical value only
* Corresponding Polymerization Degree = 1,000
** Corresponding Polymerization Degree = 1,300

SPECIAL GRADES PVC RESIN
High Flow Series

Our High Flow Series PVC resins exhibit high melt flow rates and faster fusion properties, enabling easier polymer flow into injection molds and homogenous mixtures in extruders before the die-casting process. As PVC resins that truly improves manufacturing productivity, the High Flow Series is also known for its reduction of defective products.

	Rigid Applications	
GRADE	**SF581**	**SP661**
Recommended applications	- Fitting - Rigid injection products - Rigid foam sheet and rigid profile - Floortile	- Pipe and conduit - Door and window frame - Construction profile
K value [-]	56.7*	64.1**
Apparent bulk density [g/ml]	0.57	0.57
Volatile matter [%]	0.1	0.1
Sleve analysis, retained at 250 microns [%]	0.1	0.3
Sleve analysis, retained at 75 microns [%]	95.7	97.9
Impurities and foreign matter [Points/100g]	5	3
Residual vinyl chloride monomer [ppm]	0.4	0.4
Key characteristics	- Excellent fushion properties - Excellent processability - High flowability - Good thermal stability	- Excellent fushion properties - Excellent processability - High flowability - High bulk density - Good thermal stability

Remark: Typical value only
* Corresponding Polymerization Degree = 650
** Corresponding Polymerization Degree = 900

SPECIAL GRADES PVC RESIN
Non-Bisphenol A Series

Our Non-Bisphenol A Series is developed as an alternative to general grades, formulated without using Bisphenol A as an additive. It provides excellent performance with good fish-eye properties, clean initial coloration, strong thermal stability, and a low contamination level—ensuring safer and more reliable processing.

	Rigid Applications		
GRADE	**SF58J**	**SG58J**	**SG61J**
Recommended applications	- Fitting - Floor tile (Wood plastic composit /WPC and Luxury vinyl tile ,LVT) - Rigid foam sheet, other rigid profile. - Adhesive	- Rigid sheet packaging - Blister packs - Shrink wrap & shrink label flim - Bottle and IC tube - Furniture trimmimg - Rigid foam sheet, other rigid profile	- Rigid sheet packaging, stationery, christmastree - Credit card - Blister pack - Shrink wrap & shrink label flim - Sticker and decorative sheet - Floortile (Wood plastic composit /WPC and Luxury vinyl tile, LVT) - Rigid foam sheet, other rigid profile. - Electrical plug - Shoes - Toy
K Value [-]	58.2*	58.3*	61.0**
Apparent bulk density [g/ml]	0.60	0.59	0.58
Volatile matter [%]	0.15	0.1	0.1
Sieve analysis, retained on 250 microns [%]	0.1	0.6	0.1
Sieve analysis, retained on 75 microns [%]	92.9	91.5	95.8
Impurity and foreign matter [Points/100g]	5	2	1
Residual vinyl choride monomer [ppm]	0.4	0.4	0.3
Volume resistivity [Ohm-cm]	-	-	1.2×10^{13}
Key characteristics	- Good fusion properties - Good processability - Good thermal stability	- Good fusion properties - Good initial coloration - Excellent thermal stability - Low contamination	- Good thermal stability - Good initial coloration - Low contamination

Remark: Typical value only
* Corresponding Polymerization Degree = 700
** Corresponding Polymerization Degree = 800

SPECIAL GRADES PVC RESIN
Non-Bisphenol A Series

	Soft Applications		
GRADE	**SP66J**	**SG66J**	**SG71J**
Recommended applications	- Pipe and conduit - Door, window frame and edge bond - Rigid contruction profile - Floortile (Stone plastic composit /SPC)	- Transparent sheet, curtains, agricultureal sheet - Artificial leather - Shink warp & shrink lable film - Cling film - Electrical wire and cable - Furniture trimming and soft contruction profile - Hose - Shoes - Toy	- Inflatable sheet and flexible sheet packaging - Artificial Leather - Cling film - Electrical tape - Electrical wire and cable - Wire harnesses - Furniture trimming and soft contruction profile - Hose - Toy
K Value [-]	65.7**	66.1*	71.3**
Apparent bulk density [g/ml]	0.56	0.56	0.49
Volatile matter [%]	0.1	0.1	0.1
Sieve analysis, retained on 250 microns [%]	0.3	0.1	0
Sieve analysis, retained on 75 microns [%]	98.3	98.5	98.6
Impurity and foreign matter [Points/100g]	1	1	1
Residual vinyl choride monomer [ppm]	0.2	0.3	0.3
Volume resistivity [Ohm-cm]	-	4.0×10^{13}	4.3×10^{13}
Key characteristics	- High Bulk density - Good flowability - Good thermal stability	- Good thermal stability - Good initial coloration - Good electrical resistance - Low contamination	- Good mechanical performance - Good thermal stability - Good initial coloration - Good electrical resistance - Low contamination

Remark: Typical value only
* Corresponding Polymerization Degree = 1,000
** Corresponding Polymerization Degree =1,300

SPECIAL GRADES PVC RESIN
PVC Copolymer -Easy Melt Series.

Polyvinyl Chloride Copolymer is white and free-flowing resin produced by suspension polymerization process. When compared to PVC homopolymer, this product is be better processibility by improving productivity, lowering torque and reducing processing temperature. Furthermore, the special characteristic can increase additive compatibility, resulting in enhance mechanical property of finished product. Nevertheless, in the plasticized formulation, the plasticizer content can be reduced due to increase flexibility benefit of this material.

	Rigid Applications	
GRADE	**GG600**	**GG700**
Recommended applications	- Credit card - Blister pack - Shrink wrap & shrink label film - Rigid foam sheet, other rigid profile - Adhesive	- Rigid profile and door panel - Rigid sheet for cooling tower - Electrical conduit high impact pipe - Wire & cable
K value [-]	60.2	68.9
Apparent bulk density [g/ml]	0.62	0.54
Volatile matter [%]	0.1	0.1
Sleve analysis, retained at 250 microns [%]	0	0
Sleve analysis, retained at 75 microns [%]	97.5	98.5
Impurities and foreign matter [Points/100g]	2	1
Residual vinyl chloride monomer [ppm]	1.4	0
Key characteristics	- Ease for processing - Increase flexibilty - Excellent lamination at low temperature - Improve surface smoothness and glossy - Enhance mechanical properties	- Ease for processing - Increase flexibilty - Enhance strength and toughness - Improve surface smoothness and glossy

Remark: Typical value only

GENERAL GRADES
PVC Resin

Our PVC resins are produced via a suspension polymerization process, while providing powder and free flow resins that can contain quality of additives with standard mixing techniques. These resins are suitable for general purpose products and a wide range of other applications.

	Rigid Applications		
GRADE	**SF580**	**SG580**	**SG610**
Recommended applications	- Fiiting - Floortile (Wood plastic composite /WPC and luxury vinyl tile/LVT) - Rigid foam sheet and other profile - Adhesive	- Stationery abd rigid sheet packaging - Shrink wrap and shrink label film - IC tube - Furniture trimming - Rigid foam sheet and other rigid profile	- Rigid sheet packaging, stationery, christmas tree - Credit card - Shink wrap and shrink label flim - Sticker and decorative sheet - Floor tile (Wood plastic composit /WPC and luxury vinyl tile/LVT) - Rigid foam sheet and other rigid profile - Electrical plug - Shoes
K value [-]	57.9*	58.3*	61.0**
Apparent bulk density [g/ml]	0.57	0.59	0.58
Volatile matter [%]	<0.3	<0.3	<0.3
Sleve analysis, retained at 250 microns [%]	<0.2	<0.2	<0.2
Sleve analysis, retained at 75 microns [%]	>85.0	>85.0	>90.0
Impurities and foreign matter [Points/100g]	<10	<5	<5
Residual vinyl chloride monomer [ppm]	<1.0	<1.0	<0.1
Volume resistivity [Ohm-cm]	-	-	$1.1x10^{13}$
Key characteristics	- Good fusion properties - Good processability - Good thermal stability	- Good fusion properties - Good initial coloration - Goof thermal stability - Low contamination	- Good thermal stability - Good initial coloration - Low contamination

Remark: Typical value only
* Corresponding Polymerization Degree = 700
** Corresponding Polymerization Degree = 800

GENERAL GRADES
PVC Resin

	Rigid Applications	Soft Applications	
GRADE	**SP660**	**SG660**	**SG710**
Recommended applications	- Pipe and conduit - Door, window frame and edge bond - Rigid contruction profile - Floortile (Stone plastic composit /SPC)	- Transparent sheet, curtain, agricultural sheet - Artificial leather - Shink warp & shrink lable film - Electrical wire and cable - Furniture trimming and soft contruction profile - Hose - Shoes	- Inflatable sheet and flexible sheet packaging - Artificial Leather - Electrical tape - Electrical wire and cable - Wire harnesses - Furniture trimming and soft contruction profile - Hose
K value [-]	65.4*	66.0*	71.3**
Apparent bulk density [g/ml]	0.56	0.55	0.50
Volatile matter [%]	<0.3	<0.3	<0.3
Sleve analysis, retained at 250 microns [%]	<0.2	<2.0	<0.2
Sleve analysis, retained at 75 microns [%]	>90.0	>90.0	>90.0
Impurities and foreign matter [Points/100g]	<10	<5	<5
Residual vinyl chloride monomer [ppm]	<1	<1	<1
Volume resistivity [Ohm-cm]	-	4.0×10^{13}	4.7×10^{13}
Key characteristics	- High bulk density - Good flowability - Good thermal stability	- Good thermal stability - Good initial coloration - Good electrical resistance - Low contamination	- Good mechanical performance - Good thermal stability - Good inital coloration - Good electrical resistance - Low contamination

Remark: Typical value only
* Corresponding Polymerization Degree = 1000
** Corresponding Polymerization Degree = 1,300

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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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