

PVC RESINS



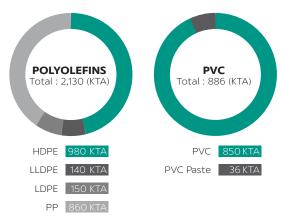
About SCG Chemicals or SCGC

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)



ESG Strategic Directions



"INNOVATION THAT'S REAL"

PVC RESINS

SCGC™ PVC resins 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 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 resins made with an advanced suspension polymerization process, making it completely recyclable and environmentally friendly. SCGC™ PVC resins 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 resins 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 resins 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.





PVC COPOLYMER

Polyvinyl Chloride Copolymer is white and free-flowing resins produced by suspension polymerization process. When compared to PVC homopolymer, this product are be better processibility by improve productivity, lower torque and reduce 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.

GRADE	GG600	GG700
K value (-)	60	70
Apparent bulk density (g/ml)	0.65	0.53
Volatile matter (%)	0.1	0.1
Sleve analysis, retained at 250 microns (%)	<2	<2
Sleve analysis, retained at 75 microns (%)	>90	>90
Impurities and foreign matter (Points/100g)	<20	<20
Residual vinyl chloride monomers (ppm)	<2	<2
Key characteristics	 Ease for processing Enhance mechanical property Improve surface smoothness and glossy Excellence lamination at low temperature Increase flexibility 	 Ease of processing Enhance strength and toughness Increase material flexibility
Recommended applications	 Rigid sheet eg. credit card, blister packaging Rigid profile / rigid foam profile eg. wall panel, window and door frame Rigid Film eg. shrink wrap, shrink label Soft Sheet eg. sticker sheet Solvent welding cement 	 Rigid profile eg. electriacl conduit, high impact pipe, door panel Rigid sheet eg. sheet for cooling tower fills Soft extrusion eg. gasket, wire & cable





SPECIAL GRADE PVC RESINS 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.

GRADE	SG500	SG730	SG760	SG840
	3G500	SG/30	30/60	SG840
K value (-)	49.3	73.7	76.8	85.2
Apparent bulk density (g/ml)	0.58	0.48	0.47	0.48
Volatile matter (%)	0.2	0.1	0.1	0.1
Sleve analysis, retained at 250 microns (%)	0.1	0.1	0.1	0.1
Sleve analysis, retained at 75 microns (%)	95.4	95.6	97.2	97.6
Impurities and foreign matter (Points/100g)	12	5	3	3
Residual vinyl chloride monomers (ppm)	0.3	0.2	0.3	0.1
Fisheye (Point/150 cm²)	9	3	2	1
Volume resistivity (Ohm-cm)	-	4.2×10^{13}	4.8 × 10 ¹³	4.4 × 10 ¹³
Key characteristics	- Excellent fusion properties - High flowability - Excellent processability - Good thermal stability	 Good thermal stability Good initial coloration Good electrical resistance Good mechanical performance 	 Good thermal stability Good initial coloration Good electrical resistance Excellent mechanical performance Excellent plasticizer absorption and drying abilities Low fisheye Low impurities 	- Good thermal stability and initial coloration - Good electrical resistance - Excellent mechanical performance - Excellent plasticizer absorption and drying abilities - Low compression setting - Rubber-like elasticity - Long-term resistance to high and low temperatures - Improved fatigue and abrasion resistance - Low fisheye and impurities
	- Adhesives - Floor tiles	- Flexible sheet packaging		exible sheets such as mats, cove ficial leathers, and inflatable toy

Recommended applications

- Fittings
- Rigid injection products
- Products requiring high strength and thermal stability, such as wires and cables, wire harnesses, and electrical tapes
- Products requiring high strength, abrasive resistance, and
- flexibility such as automotive parts, hoses, and shoes
 Products requiring high strength and thermal stability, such as wire and cables, wire harnesses, and electrical tapes
- Products requiring high elasticity, such as loops, sandals, gear knobs, and brushes



SPECIAL GRADE PVC RESINS Non-Bisphenol A Series

Our Non-Bisphenol A Series have good fisheye properties and initial coloration, thermal stability, and low contamination levels.

GRADE	SG58J	SG61J	SG66J	SP66J	SG71J
K value (-)	58.2	61.0	66.1	65.5	71.5
Apparent bulk density (g/ml)	0.58	0.58	0.56	0.56	0.49
Volatile matter (%)	0.1	0.1	0.1	0.1	0.1
Sleve analysis, retained at 250 microns (%)	0.1	0.1	0.1	0.3	0.1
Sleve analysis, retained at 75 microns (%)	94.1	94.8	97.0	97.8	98.5
Impurities and foreign matter (Points/100g)	2	4	3	8	3
Residual vinyl chloride monomers (ppm)	0.3	0.3	0.3	0.2	0.3
Volume resistivity (Ohm-cm)	-	1.0 × 10 ¹³	4.3 × 10 ¹³	-	4.7 × 10 ¹³
Key characteristics	 Excellent fusion properties Good thermal stability Good initial coloration Low impurities 	- Good initial coloration	 Good thermal stability Good initial coloration Good electrical resistance Low impurities 		 Good thermal stability Good initial coloration Good electrical resistance Good mechanical performance Low impurities
Recommended applications	 Rigid sheet packaging Credit cards Blister packs Shrink films Bottle and IC tubes Furniture trimmings Construction profiles 	Credit cardsBlister packsShrink filmsStickers and decorative sheets	Wrap and cling filmsFurniture trimmingsElectrical wires and cablesHoses		 Rigid sheet packaging Artificial leather Infatable toys Wrap and cling films Automotive parts Electrical tapes Electrical wires and cables Wire harnesses Gaskets Hoses



SPECIAL GRADE PVC RESINS Z Series

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

GRADE	SG66Z	SG71Z
K value (-)	66.0	71.1
Apparent bulk density (g/ml)	0.53	0.50
Volatile matter (%)	0.1	0.1
Sleve analysis, retained at 250 microns (%)	0.1	0.1
Sleve analysis, retained at 75 microns (%)	97.8	98.1
Impurities and foreign matter (Points/100g)	3	2
Residual vinyl chloride monomers (ppm)	0.2	0.1
Fisheye (Point/150 cm²)	3	2
Volume resistivity (Ohm-cm)	4.4×10^{13}	4.7×10^{13}
Key characteristics	 Good thermal stability Good initial coloration Good electrical resistance Excellent plasticizer absorption and drying abilities Very low fisheye 	 Good thermal stability Good initial coloration Good electrical resistance Good mechanical performance Excellent plasticizer absorption and drying abilities Very low fisheye Low impurities
Recommended applications	 Flexible sheet packaging Stickers and decorative sheets Electrical wires and cables Shrink films Wrap and cling films Soft-touch extrusion profiles 	 Flexible sheet packaging Wrap and cling films Automotive parts Electrical tapes Electrical wires and cables Wire harnesses Soft-touch extrusion profiles Gaskets



SPECIAL GRADE PVC RESINS 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.

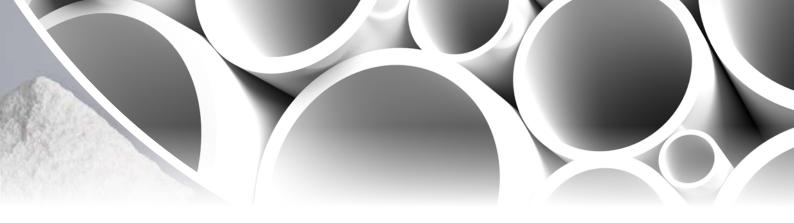
GRADE	SF581	SP661
K value (-)	56.7	63.8
Apparent bulk density (g/ml)	0.57	0.58
Volatile matter (%)	0.1	0.1
Sleve analysis, retained at 250 microns (%)	0.1	0.3
Sleve analysis, retained at 75 microns (%)	95.7	97.8
Impurities and foreign matter (Points/100g)	10	8
Residual vinyl chloride monomers (ppm)	0.4	0.3
Key characteristics	 Excellent fusion properties High flowability Excellent processability Good thermal stability 	 Excellent fusion properties High bulk density High flowability Excellent processability Good thermal stability
Recommended applications	- Fittings - Rigid injection products - Construction profiles	PipesDoor and window framesConstruction profiles



GENERAL GRADE PVC Resins

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.

GRADE	SF580	SG580	SG610
K value (-)	58.1	58.2	61.0
Apparent bulk density (g/ml)	0.57	0.57	0.58
Volatile matter (%)	0.1	0.1	0.1
Sleve analysis, retained at 250 microns (%)	0.1	0.1	0.1
Sleve analysis, retained at 75 microns (%)	94.9	95.1	94.8
Impurities and foreign matter (Points/100g)	10	3	4
Residual vinyl chloride monomers (ppm)	0.4	0.3	0.3
Volume resistivity (Ohm-cm)	-	-	1.0 × 10 ¹³
Key characteristics	- Excellent fusion properties - Good thermal stability	Excellent fusion propertiesGood thermal stabilityGood initial coloration	- Good thermal stability - Good initial coloration
Recommended applications	- Adhesives - Fittings - Rigid injection products	 Rigid sheet packaging Stationery Credit cards Furniture trimmings Construction profiles 	 Rigid sheet packaging Stationery Credit cards Floor coverings Stickers and decorative sheets Floor tiles Furniture trimmings Construction profiles Electrical plugs



SG660	SP660	SG710
66.0	65.5	71.3
0.55	0.56	0.49
0.1	0.1	0.1
0.1	0.3	0.3
97.9	97.8	97.9
5	8	5
0.3	0.2	0.1
3.8 x 10 ¹³	-	4.8 × 10 ¹³
Good thermal stabilityGood initial colorationGood electrical resistance	High bulk densityGood flow abilityGood thermal stability	Good thermal stabilityGood initial colorationGood electrical resistanceGood mechanical performance
 Flexible sheet packaging Curtains Floor coverings Furniture trimmings Electrical wires and cables Hoses Shoes 	- Pipes - Rigid extrusion parts	 Flexible sheet packaging Artificial leather Infatable toys Automotive parts Electrical tapes Electrical wires and cables Wire harnesses Gaskets Hoses



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Disclaimer:

- The applications specified for reference only.
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 our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however
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