PVC
PASTE RESINS

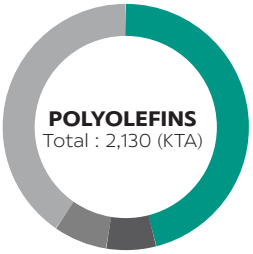
About SCG Chemicals or SCGC

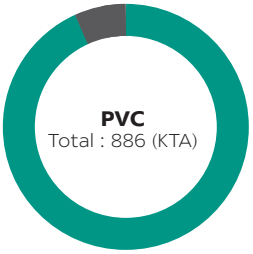
SCG Chemicals or SCGC is one of the leader in sustainable chemical innovations and manufacturing in Thailand and ASEAN that offers a full range of petrochemical products ranging from upstream production of olefins to downstream production of 3 main plastics resins: polyethylene, polypropylene, and polyvinyl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





HDPE	980 KTA	PVC	850 KTA
LLDPE	140 KTA	PVC Paste	36 KTA
LDPE	150 KTA		
PP	860 KTA		

ESG Strategic Directions

“INNOVATION THAT’S REAL”

PVC
PASTE RESINS

SCGC™ PVC paste resins can produce end products that are both aesthetically pleasing and adhere to high safety and environmental standards.

The growth of the transportation, building and infrastructure, medical, and consumer product industries come with higher standards expected from consumers and producers worldwide.

In recognition of its great responsibility, SCGC has developed SCGC™ polyvinyl chloride (PVC) paste resins made with its uniquely advanced hybrid technology. Also known as emulsion or dispersion PVCs, these resins are mixed with plasticizers and additives to produce plastisols in paste form, which can be used in many processes, such as surface coating, dipping, spraying, and molding to make various products, such as wallpapers, automotive sealant, tarpaulins and synthetic leather.

With excellent clarity, mechanical strength, foaming properties, and low viscosity, SCGC™ PVC paste resins can produce end products that are both aesthetically pleasing and adhere to high safety and environmental standards, such as the Green Building Council of Australia (GBCA), RoHS Directive, and REACH[1]

Thus, SCGC believes in partnering with manufacturers for responsible growth, enabling them to find more efficient ways to produce quality products. Our technical team collaborates with manufacturers to explore ways to use less raw materials and energy, discover new applications, or find optimal solutions based on specific needs and requirements.

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

Remark: (1) certified under registered volume

Design for Sustainability

SCGC™ PVC:
for Foaming Applications

PF621	
Characteristics	- Low viscosity even at high filler loads - Excellent foaming properties in chemically blown foams even at high filler loads - High foam whiteness - Foam achieved at high expansion levels
Applications	- Wallpaper - Printing ink

SCGC™ PVC:
for General Purpose

PG740	
Characteristics	- Low viscosity - High transparency and glossy surface - High machanical strenght; tensile and elongation
Applications	- Tarpaulins - Synthetic leathers - Automotive sealants and mastics - Floorings

PVC PASTE RESINS
Specialty Foam PVC Paste Resins

GRADE	PF621	PF682	PF741
K value ISO 1682-2 (-)	63	69	74
Degree of polymerization (DP) Refer to JIS K6721 (-)	890	1,140	1,470
Brookfield viscosity ASTM D1824 (Poise)	77	56	39
Severs viscosity RY-W-QC-E030 (Poise)	71	93	75
Volatile content ISO 1269 at 100 C (%)	0.19	0.23	0.21
Key characteristics	- Compatible with non-phthalate plasticizer - Very fine closed cells and homogenous cell structure - High foam whiteness - Foaming at high expansion levels - Slightly pseudoplastic (slightly viscous at low and high shear mixing) - Good heat stability	- Very fine closed cells and homogeneous cell structure - High foam whiteness - Foaming at high expansion levels - Slightly pseudoplastic (slightly viscous at low and high shear mixing) - Good heat stability	- Good foaming properties and fine cell structure - Thicker chemically blown foams with high plasticizer contents - Exhibits no flow-like diatancy even at high shear rates - Good viscous stability - High physical strength
Recommended applications	- Wallpapers - Printing inks	- Synthetic leathers (foam layer) - Wallpapers - Flooring (foam layer for cushioned vinyl floorings, yoga mats) - Dotted gloves	- Synthetic leathers (top and foam layers) - Automotive sealants and mastics

Remark: Typical values only

PVC PASTE RESINS
High Clarity PVC Paste Resins

GRADE	PC750
K value ISO 1682-2 (-)	76
Degree of polymerization (DP) Refer to JIS K6721 (-)	1,600
Brookfield viscosity ASTM D1824 (Poise)	35
Severs viscosity RY-W-QC-E030 (Poise)	94
Volatile content ISO 1269 at 100 C (%)	0.24
Key characteristics	- High glossy surface - High clarity - High mechanical strentgth
Recommended applications	- Tarpaulins (with highly glossy surfaces) - Synthetic leathers (with highly glossy top layers) - Floorings (top layers) - Strand and mesh coatings - Toys, logos, and transparent terminal sleeves

Remark: Typical values only

PVC PASTE RESINS
General Purpose PVC Paste Resins

GRADE	PG680	PG740	PG770
K value ISO 1682-2 (-)	69	74	79
Degree of polymerization (DP) Refer to JIS K6721 (-)	1,135	1,465	1,870
Brookfield viscosity ASTM D1824 (Poise)	36	32	29
Severs viscosity RY-W-QC-E030 (Poise)	87	88	102
Volatile content ISO 1269 at 100 C (%)	0.18	0.18	0.22
Key characteristics	- Foams with a fine and homogenous cell structure - Low viscosity and good viscous stability - Excellent air release properties - Good heat stability	- Low viscosity and good viscous stability - Excellent air release properties - Good heat stability - High mechanical strength	- Excellent mechanical strength - Low viscosity and good viscous stability - Good air release properties - Excellent heat stability
Recommended applications	- Synthetic leather (foam layer, adhesive layer) - Wallpaper - Flooring (foam layer for cushioned vinyl floor, backing layer for carpet tiles) - Strand & Mesh coating - Automotive sealants & mastic	- Tarpaulin - Synthetic leather (Top layer) - Automotive sealants & mastic - Conveyor belts - Flooring (Top layer) - Strand & Mesh coating - Toys, tool handle, terminal sleeve - Printing ink	- Disposable gloves - Synthetic leather (high strength top layer) - High strength tarpaulin - Strand & Mesh coating - Flooring (high strength top layer) - Can coating - Automotive sealants & mastic

Remark: Typical values only

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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.
- The customer is responsible for appropriate, safe, legal use, processing and handling of the product. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
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