

# PE WAX





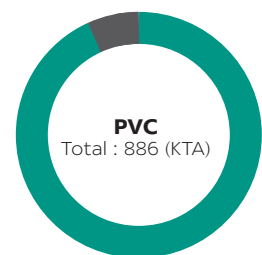
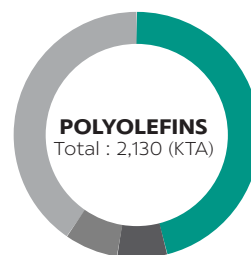
## About SCG Chemicals or SCGC

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”**







# PE WAX

**SCGC is committed to deliver superior polyethylene waxes to our customers in a variety of industries, and we will continue to optimize our manufacturing processes so that our customers can provide high-quality products to consumers in a sustainable, energy-efficient way.**

SCGC™ PE Wax enhances the quality and consistency of substances in many end formulations, improving products' physical and thermal properties, processability, and appearance. A superior product, SCGC™ PE Wax can be used in many applications, such as hot-melt adhesives, color and filler masterbatches, thermoplastic road marking paints, and as rubber or PVC.

A leading wax producer, SCGC offers a widely diversified portfolio of synthetic waxes, including polyethylene homopolymer waxes and thermal cracked polyethylene waxes.

Our polyethylene homopolymer waxes are manufactured via SCGC's unique high-density polyethylene (HDPE) production process, which employs advanced technology in a closed-loop refinery. Produced under stringent quality control standards, our products have a narrow range of variability and consistent quality.

Our thermal cracked polyethylene waxes are a distinguished class of polyethylene homopolymer wax produced by thermal cracking. SCGC's expertise and innovative technology ensures that our thermal cracked polyethylene wax products are suitable for a variety of applications across different industries.

Our oxidized polyethylene wax is derived from SCGC's proprietary manufacturing process. Our products are manufactured with conscientious care to ensure a narrow range of variability in their properties and consistent product quality. Oxidized polyethylene waxes are specially designed for use in PVC, textile, and paint & coating applications.

At SCGC, we are committed to delivering superior polyethylene waxes to our customers in various industries. Our continuous dedication to optimizing our manufacturing processes ensures that our customers can provide top-quality products to end consumers in a sustainable, energy-efficient way.

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



12 RESPONSIBLE CONSUMPTION AND PRODUCTION





## SCGC™ PE WAX: Key Benefits in Each Application



### Hot Melt Adhesive

- Adjusted open and set time
- Enhanced heat resistance
- Reduced viscosity for improved wettability



### PVC

- Adjusted fusion time and reduced fusion torque
- Enhanced dynamic heat stability
- Excellent external lubricant



### Color/Filler Masterbatch

- Improved pigment dispersion in plastic
- Higher pigment/filler load
- Increased color strength



### Plastic Processing aid

- Improved flow ability
- Waste reduction from unstable plastic flow
- Improve productivity
- Reduced energy consumption



### Thermoplastic Road Marking

- Enhanced heat resistance
- Reduced viscosity
- Improved component dispersion



### Printing Ink, Paint & Coating

- Improved rub/abrasion resistance
- Improved surface slip
- Provided durability from surface protection



### Rubber Processing

- Improve productivity
- Improved particles dispersion
- Reduced viscosity



### Wax emulsion for textile

- Provide good stability of wax in emulsion
- Improve sewability/handling of textile
- Provide smooth surface of textile
- Good abrasion resistance



## SCGC™ PE WAX: Refined Polyethylene Homopolymer Wax

GRADE	LP1020P	LP1040P	LP1060P	LP1024P	LP1040T
Physical form	Powder	Powder	Powder	Powder	Pastille
Viscosity at 149 °C (cPs) ASTM D 3236	10-20	20-40	40-60	10-40	20-40
Density * (g/cm <sup>3</sup> ) ASTM D 1505	0.94	0.94	0.94	0.95	0.94
Dropping point * (°C) ASTM D 3954	116	116	116	118	116
Penetration index (d.mm) ASTM D 1321	≤ 2	≤ 2	≤ 2	≤ 1	≤ 2
Regulatory compliances	- US FDA 21 CFR 178.3720 Petroleum wax, synthetic - US FDA 21 CFR 175.105 Adhesive - Directive 2002/95/EC (RoHS) and Directive 2011/65/EU (RoHS Recast) - Regulation (EC) No. 1907/2006 (REACH) - Directive 94/62/EC on packaging and packaging waste (PPWD)				

Remark: \* Typical values only



Recommended Applications						
GRADE	LP1020P	LP1040P	LP1060P	LP1024P	LP1040T	Recommend dosage
Hot melt adhesive	*	✓	✓	*	✓	20-30%
PVC	*	✓	✓		✓	0.5-1.5 phr
Thermoplastic road marking	*	✓	✓		✓	1-3%
Color masterbatch	✓	✓	✓		✓	10-30%
Filler masterbatch	✓	✓	✓			5-10%
Cable filler compound	*	✓	✓		✓	5-10 phr
Candle	✓	✓	✓		✓	3-5%
Rubber	✓	✓	✓		✓	1-2 phr
Printing Ink, Paint & Coating	✓	✓	✓	*		1-3%
Plastic processing aid					*	1-3%

Remark: \* Best Seller  
✓ Recommended





## SCGC™ PE WAX: Polyethylene Homopolymer

GRADE	LP0020P	LP0040P	LP0100P	LP8110P	LP0100F
<b>Physical form</b>	Powder	Powder	Powder	Powder	Flake
<b>Viscosity at 149 °C</b> (cPs) ASTM D 3236	≤20	20-40	40-100	≤40	40-100
<b>Density *</b> (g/cm³) ASTM D 1505	0.92	0.92	0.92	0.92	0.92
<b>Dropping point *</b> (°C) ASTM D 3954	113	113	113	113	113
<b>Penetration index</b> (d.mm) ASTM D 1321	≤4	≤4	≤4	≤4	≤4
<b>Regulatory compliances</b>	- Directive 2002/95/EC (RoHs) and Directive 2011/65/EU (RoHs Recast) - Regulation (EC) No. 1907/2006 (REACH) - Directive 94/62/EC on packaging and packaging waste (PPWD)				

Remark: \* Typical values only

Recommended Applications					
GRADE	LP0020P	LP0040P	LP0100P	LP8110P	LP0100F
<b>Hot melt adhesive</b>	✓	✓	✓		
<b>PVC</b>	*	✓	✓		
<b>Thermoplastic road marking</b>	✓	✓	✓	✓	✓
<b>Color masterbatch</b>	✓	✓	✓		
<b>Filler masterbatch</b>	*	✓	✓	✓	✓
<b>Candle</b>	✓	✓	✓	✓	✓
<b>Rubber</b>	✓	✓	✓		

Remark: \* Best Seller  
✓ Recommended



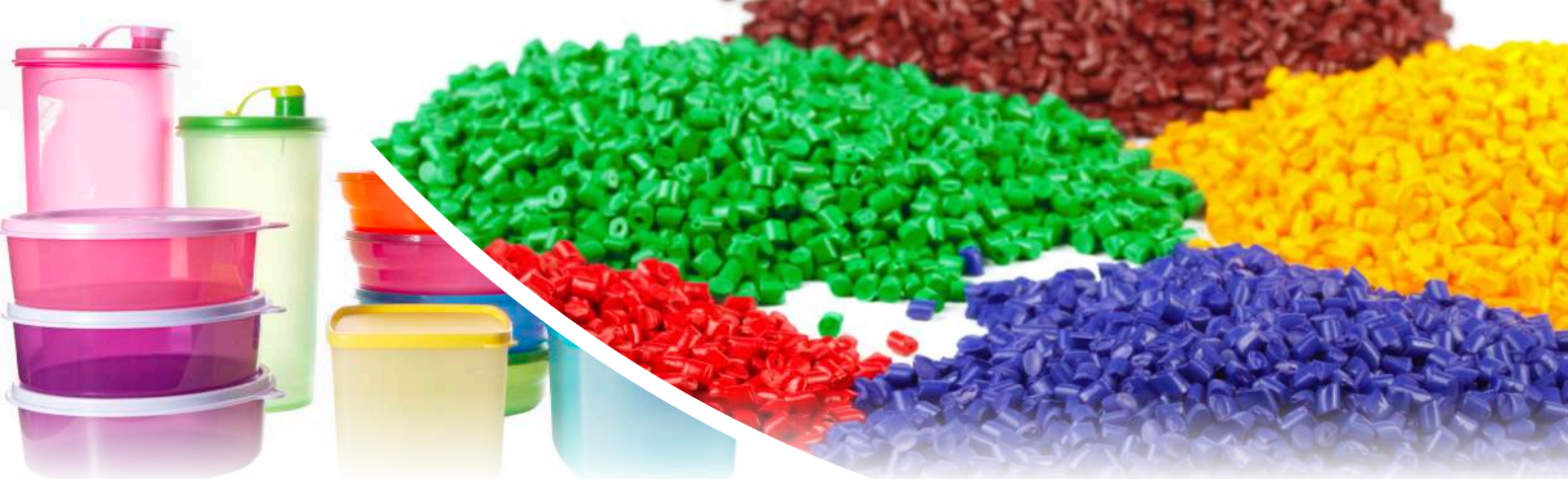
GRADE	LP0200F	LP0400F	LP0500F	LP0600F	LP0700F	LP8110F
<b>Physical form</b>	Flake	Flake	Flake	Flake	Flake	Flake
<b>Viscosity at 149 °C</b> (cPs) ASTM D 3236	100-200	200-400	400-800	800-1,500	> 1,500	≤40
<b>Density *</b> (g/cm <sup>3</sup> ) ASTM D 1505	0.92	0.92	0.92	0.92	0.92	0.91
<b>Dropping point *</b> (°C) ASTM D 3954	113	113	113	113	113	112
<b>Penetration index</b> (d.mm) ASTM D 1321	≤4	≤4	≤4	≤4	≤4	≤4
<b>Regulatory compliances</b>	- Directive 2002/95/EC (RoHs) and Directive 2011/65/EU (RoHs Recast) - Regulation (EC) No. 1907/2006 (REACH) - Directive 94/62/EC on packaging and packaging waste (PPWD)					

Remark: \* Typical values only

Recommended Applications							
GRADE	LP0200F	LP0400F	LP0500F	LP0600F	LP0700F	LP8110F	Recommend dosage
<b>Hot melt adhesive</b>							20-30%
<b>PVC</b>							0.5-1.5 phr
<b>Thermoplastic road marking</b>	✓						1-3%
<b>Color masterbatch</b>							10-30%
<b>Filler masterbatch</b>	*	*	✓	✓	✓	✓	5-10%
<b>Candle</b>	✓	✓	✓	✓	✓	✓	3-5%
<b>Rubber</b>							1-2 phr

Remark: \* Best Seller  
✓ Recommended





## SCGC™ PE WAX: Thermal Cracked Polyethylene Wax

GRADE	WD2020P/PX	WD2040P/PX	WD2110P/PX
Physical form	Powder	Powder	Powder
Viscosity at 140 °C (cPs) ASTM D 3236	150-250	350-450	1,000-1,200
Density * (g/cm <sup>3</sup> ) ASTM D 1505	0.92	0.92	0.92
Softening point * (°C) ASTM D 3954	107	109	110
Penetration index (d.mm) ASTM D 1321	≤2	≤2	≤1
Regulatory compliances	<ul style="list-style-type: none"> <li>- US FDA 21 CFR 178.3720 Petroleum wax, synthetic</li> <li>- US FDA 21 CFR 175.105 Adhesive</li> <li>- Directive 2002/95/EC (RoHs) and Directive 2011/65/EU (RoHs Recast)</li> <li>- Regulation (EC) No. 1907/2006 (REACH)</li> <li>- Directive 94/62/EC on packaging and packaging waste (PPWD)</li> <li>- EN71 Part 3: 2913 European Standard on safety of toys</li> </ul>		

Remark: \* Typical values only



Recommended Applications				
GRADE	WD2020P/PX	WD2040P/PX	WD2110P/PX	Recommend dosage
Hot melt adhesive	*			20-30%
PVC	*	✓	✓	0.5-1.5 phr
Thermoplastic road marking		*		1-3%
Color masterbatch	*	*	*	10-30%
CaCO <sub>3</sub> filler masterbatch	✓	✓	✓	5-10%
Rubber	*	✓	✓	1-2 phr

Remark: \* Best Seller  
✓ Recommended



## SCGC™ PE WAX: Oxidized Low Density Polyethylene Wax

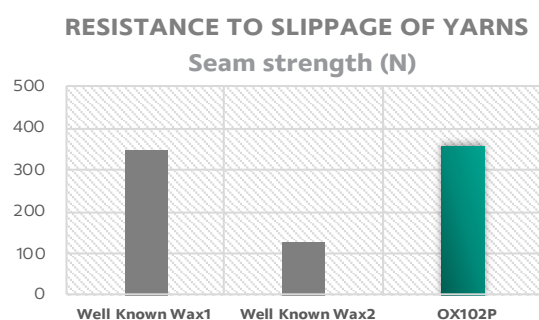
### KEY FEATURES:

- Good lubricity
- Easy emulsification with suitable polarity
- Good heat resistance
- Consistent quality and supply

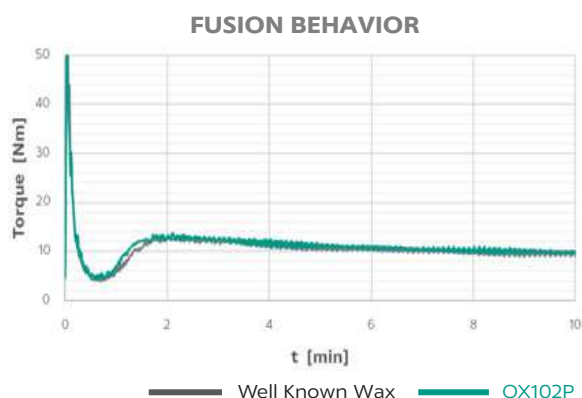
GRADE	OX102P
<b>Acid Number</b> (mg KOH/g) ASTM D1386	15-17
<b>Viscosity at 140°C</b> (cP) ASTM D 3236	250
<b>Density</b> (g/cm <sup>3</sup> ) ASTM D 1505	0.94
<b>Dropping Point</b> (°C) ASTM D 3954	104
<b>Physical form</b>	Powder

### PRODUCT PERFORMANCE FOR TEXTILE FINISHING:

ABRASION RESISTANCE	
Sample	Abrasion resistance (cycles)
Well Known Wax1	> 30,000
Well Known Wax2	> 30,000
OX102P	> 30,000



### PRODUCT PERFORMANCE OF RIGID PVC:







**SCG Chemicals PLC.**

**1 Siam Cement Road, Bangsue, Bangkok 10800, Thailand**

**Email: [PE-wax@scg.com](mailto:PE-wax@scg.com)**

**[www.scgchemicals.com](http://www.scgchemicals.com)**



**Scan to Email Us**



**Scan to Visit  
Our Website**



**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.
- No liability can be accepted in respect for the use of the product in conjunction with other materials. The information contained herein relates exclusively to the product when it is not used in conjunction with any third party's materials.