



# POST-CONSUMER RECYCLED RESIN

MECHANICAL RECYCLING



CONNECTING THE WORLD THROUGH RECYCLING SOLUTIONS

# CHEMICALS BUSINESS FOR SUSTAINABILITY

SCGC is determined to achieve leadership in integrated chemicals business for sustainability and committed to conducting business in line with Environmental, Social, and Governance (ESG) for achieving Sustainable Development Goals (SDGs) with SCGC sustainable development strategies.



## ESG Strategic Directions

Towards our vision for sustainable future, SCGC has integrated the concept of circular economy into our core strategies to provide green solutions in polymer business, resulting in **SCGC GREEN POLYMER™** with 4 major solutions: **Reduce, Recyclable, Recycle, and Renewable.**

## SCGC Green Solutions to Enable Circularity



### REDUCE

Enhancing Material for Eco-efficiency



### RECYCLABLE

Design for Recyclability



### RECYCLE

Mechanical & Advanced Recycling



### RENEWABLE

Bioplastics

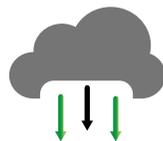
**“ With sustainability at the core of our business, SCGC is passionately committed to improving people’s lives and protecting the world for future generations ”**

## Our Goals



**1 MMT**  
Sales Volume of Green Polymer by 2030

=



**1.77 MMT**  
GHG Emission Reduction by 2030\*

=



**187 Million**  
Tree Planting\*\*

Remarks: \*Green House Gas reduction calculation guideline by Thailand Green Gas Management Organization

\*\*0.0095 MT CO2 absorption/tree/year

# A PARTNERSHIP WITH GLOBAL NETWORK

**REKS**

Kosovo



**REKS LLC** is positioned to rapidly become the largest plastic recycling facility in the region with a capacity of **16,000 tons**. The facility combines the entire plastic recycling process, encompassing collection, separation, washing, and conversion into LDPE re-granulate, while also providing support to clients in creating closed-loop systems.

Partnering with Kras, and KIVO LLC. Kras is an international undertaking established for over 70 years headquartered in Volendam, Netherlands, The company is focusing on collecting, sorting, and processing plastic waste for reuse and raw materials. We prioritize responsible waste handling, underlining social and environmental responsibility.

KIVO LLC is the largest flexible plastic packaging producer in the western Balkans to off a wide range products towards industrial consumer markets.

**Material availability: rLLDPE, rLDPE**



**Sirplaste**

Portugal



**Sirplaste** is pioneers in Portugal, A company with almost 50 years of experience in the world of recycling plastic waste.

Sirplaste receives plastic waste, a material indispensable to their activity, in bales or big bags. The plastic waste is then inspected, sorted, crushed, washed, and extruded into granules to be delivered customer base in Portugal and other European countries with an annual production capacity of **45,000 tons**.

**Material availability: rHDPE, rLDPE, rPP**



TO STRENGTHEN THE

# MECHANICAL RECYCLING SOLUTION



Thailand

**SCGC** is a leading integrated chemical player in ASEAN with strategic bases in Vietnam, Indonesia, and Thailand, offering 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.

With sustainability at the core of our business, we can turn waste into high-quality PCR by Mechanical Recycling with **6,000 tons** to recover the value of used plastics and sustainably minimize waste under circular economy principles.

**Material availability: rHDPE, rPP, rLLDPE, rLDPE**



# High Density Polyethylene



Grade	Color	Recommended Application	Melt Flow Rate at 190°C/2.16kg	Density	Flexural Modulus	Tensile Strength at Break	Elongation at Break	Notched Izod Impact	ESCR F50 (Igepal 10%)
			ASTM D1238	ASTM D792	ASTM D790	ASTM D638	ASTM D638	ASTM D256@23°C	ASTM D638
			g/10 min	g/cm <sup>3</sup>	MPa	MPa	%	J/m	Hrs
<b>PCRH01BN</b>	Natural	Bottle, Gallon, Film	0.4	0.96	1,100	20	900	90	24
<b>PCDH01BN</b>	Natural	Bottle, Gallon, Film	0.4	0.96	1,100	20	900	90	24
<b>PCDH02BW</b>	White	Bottle, Gallon, Film	0.4	0.98	1,000	20	800	50	24
<b>PCRH03BB</b>	Black	Bottle, Gallon, Film	0.5	0.97	1,000	15	500	50	24



# High Density Polyethylene

## Sirplaste®

 Portugal

Grade	Color	Recommended Application	Melt Flow Rate at 190°C/2.16kg	Density	Flexural Modulus	Tensile Strength at Break	Elongation at Break	Notched Izod Impact	ESCR F50 (Igepal 10%)
			ISO 1133-1	ISO 1183-1	ISO 178	ISO 527-2	ISO 527-2	ISO 180/A @23°C	ASTM D1693
			g/10 min	g/cm <sup>3</sup>	MPa	MPa	%	kJ/m <sup>2</sup>	Hrs
<b>SIRPRIME</b> B 00 022 NA AX	Natural	Bottle	0.2 - 0.5	0.94 - 0.96	700	12	150	25	72
<b>SIRPRIME</b> B 00 015 WH AX	White	Bottle	0.2 - 0.5	0.95 - 0.97	700	12	250	25	72
<b>SIRPAD</b> B 00 017 BK	Black	Bottle, Pipe	0.5 - 0.9	0.94 - 0.96	730	11	350	11	24
<b>SIRPAD</b> B 00 017	Grey, Blue, Green	Bottle, Pipe	0.5 - 0.9	0.94 - 0.96	730	10	350	12	24
<b>SIRPAD</b> BP 00 017 BK	Black	Pipe	0.5 - 0.9	0.94 - 0.96	700	12	220	18	24
<b>SIRBLEND</b> C 00 160 IM	Black, Grey	Large Container	5.0 - 8.0	0.90 - 0.95	700	15	120	7	24



# Low Density Polyethylene

## Linear Low Density Polyethylene



Grade	Color	Recommended Application	Melt Flow Rate at 190°C/2.16kg	Density	Tensile Strength at Break (MD/TD)	Elongation at Break (MD/TD)	Dart Drop Impact Strength (g)
			ASTM D1238	ASTM D792	ASTM D882	ASTM D882	ASTM D1709
			g/10 min	g/cm <sup>3</sup>	MPa	%	J/m
<b>PCDL01FN</b>	Translucent	Film	1.6	0.923	23/17	630/727	84



Grade	Color	Recommended Application	Melt Flow Rate at 190°C/2.16kg	Density	Tensile Strength at Yield	Notched Izod Impact	Strain at tensile Strength
			ISO 1133	ISO 1183	ISO 527	ISO 180/A	ISO 527
			g/10 min	g/cm <sup>3</sup>	MPa	J/m	%
<b>REKS - rLDPE Natural A</b>	Natural	Film	0.20 - 0.75	0.910 - 0.925	14.6	>50 (no break)	89
<b>REKS - rLLDPE Natural A</b>	Natural	Film	1.50 - 2.50	0.890 - 0.925	14.6	>45 (no break)	>350
<b>REKS - rLDPE Light Color</b>	Light grey, Green	Film	0.30 - 1.40	0.900 - 0.925	14	41.8	149
<b>REKS - rLDPE Light Color B</b>	Light grey, Green	Film, Pipe, Profile	0.50 - 1.00	0.931 - 0.935	17	51.3 (no break)	301
<b>REKS - rLDPE Dark Color</b>	Dark Color	Film, Pipe, Profile	0.38 - 0.57	0.937 - 0.941	16.2	61.1	250
<b>REKS - rLL/LD Translucent</b> (rLL/LD Translucent)	Translucent	Film, Pipe, Profile	6.50 - 9.70	0.921 - 0.925	18.6	19	347

# Low Density Polyethylene

## Sirplaste®

 Portugal

Grade	Color	Recommended Application	Melt Flow Rate at 190°C/2.16kg	Density	Tensile Strength at Break	Elongation at Break
			ISO 1133-1	ISO 1183-1	ISO 527-3	ISO 527-3
			g/10 min	g/cm <sup>3</sup>	MPa-(MD/TD)	%-(MD/TD)
<b>SIRFILM</b> PA 00 008 NA MA 2	Natural	Film	0.3 - 0.7	0.92 - 0.94	20/18	300/500
<b>SIRFILM</b> 00 008	Black, Grey, Blue, Green, Yellow, White	Film	0.6 - 1.2	0.93 - 0.95	18/15	350/500
<b>SIRMIX</b> 00 008	Black	Pipe, Film, Profile	0.6 - 1.1	0.93 - 0.95	15/12	300/500
<b>SIRTUB</b> 00 008 BK	Black	Pipe, Profile	0.5 - 1.0	0.93 - 0.95	15/12	300/500
<b>SIRFORCE</b> 00 008	Black, Grey	Profile	0.5 - 1.0	0.93 - 0.95	15/12	300/500



# Polypropylene



Grade	Color	Recommended Application	Melt Flow Rate at 230°C/2.16kg	Density	Flexural Modulus	Tensile Strength at Break	Elongation at Break	Notched Izod Impact
			ASTM D1238	ASTM D792	ASTM D790	ASTM D638	ASTM D638	ASTM D256@23°C
			g/10 min	g/cm <sup>3</sup>	MPa	MPa	%	J/m
<b>PCDP01JN</b>	Natural	Cap, Jar	6	0.910	1,300	20	150	50
<b>PCDP02JN</b>	Natural White	Cap, Pail, Jar	12	0.910	1,000	20	200	110

# Sirplaste®



Grade	Color	Recommended Application	Melt Flow Rate at 230°C/2.16kg	Density	Flexural Modulus	Tensile Strength at Break	Elongation at Break	Notched Izod Impact
			ISO 1133-1	ISO 1183-1	ISO 178	ISO 527-2	ISO 527-2	ISO 180/A @23°C
			g/10 min	g/cm <sup>3</sup>	MPa	MPa	%	KJ/m <sup>2</sup>
<b>SIRPROP</b> CP 00 200 BK IM	Black	Injection goods	15 - 20	0.915 - 0.935	1,000	18	150	5
<b>SIRPROP</b> CP 00 020	White	Film, Profile	2 - 7	0.890 - 0.910	800	17	400	9



# COLOR



**NATURAL**



**NATURAL WHITE**



**WHITE**



**TRANSLUCENT**



**HONEY**



**LIGHT GREY**



**GREY**



**YELLOW**



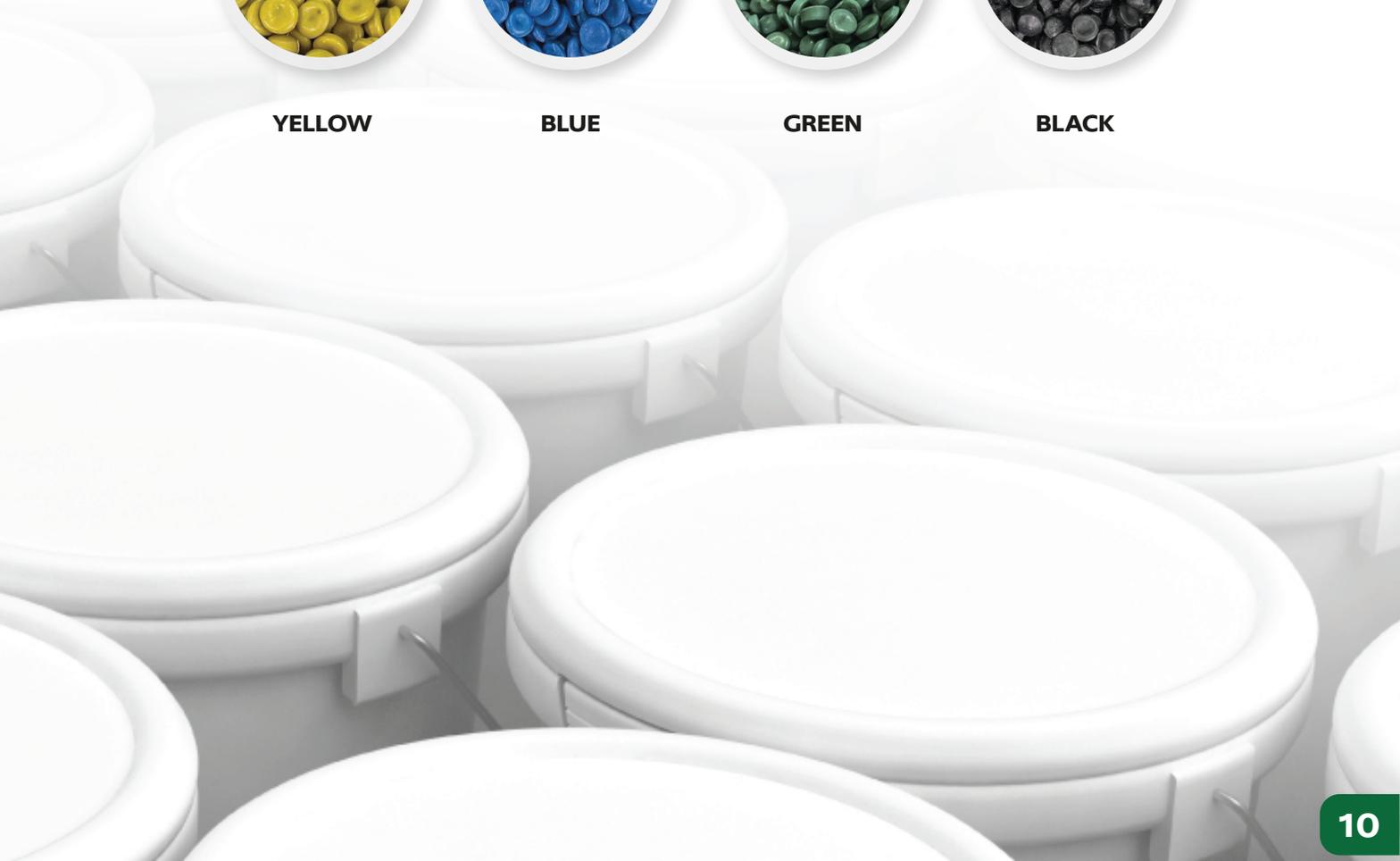
**BLUE**



**GREEN**



**BLACK**





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**Sirplaste®**

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