

FOOTWEAR







60 years of Know-how

80% export of our solutions



2,000

customers



Production

capacity of

110,000 ton/year



Exports to more than 70 countries



25 production lines



Lacoflex SBS are thermoplastic compounds based on SBS styrene-butadiene-styrene block copolymers. The polystyrene is a hard plastic, resistant that gives durability to SBS. The polybutadiene is a material that gives characteristics similar to rubber.

Its main application is in the footwear industry (soles injection), where it is easy to process at low cost and can be recycled.



Lacoflex products also offers other advantages such as good flexibility, durability, reduction or elimination of silicone use and higher productivity. It can also be pigmented to any desired color, which will correspond to a color code for a better identification.





The followings are compounds that were created to satisfy the need for crystalline products, because of the high transparency and physicomechanical properties, are suitable for use in children's shoe soles.

Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Tear strength N/mm	Max abrasion	Additional Features
TCT2	0,94	30 - 90	4 - 6	400 - 600	8 - 12	200	
TCT7	0,90	30 - 90	4 - 6	400 - 600	8 - 12	180	



OPAQUE

SBS COMPOUNDS FOR OPAQUE COMPACT FOOTWEAR

This compounds were created for shoe soles with a compact appearance, being resistant to uses of lacquers and paints, With a good behavior to flexion and abrasion wear, it is recommended for normal end use footwear.

Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Tear strength N/mm	Max abrasion	Additional Features
TCB01	0,98	30 - 90	4 - 6	400 - 600	8 - 12	180	
TCC8	0,99	30 - 90	4 - 6	400 - 600	8 - 12	220	
TCC5	1,05	30 - 90	4 - 6	400 - 600	8 - 12	250	





It is a product for lighter soles, our expanded compound is divided into two ranges called normal expanded and super expanded, the last one for very light soles.

Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Tear strength N/mm	Max abrasion	Additional Features
TCE01	0,87	30 - 80	4 - 6	400 - 600	8 - 12	200	
TCEX1	0,80	40 - 70	4 - 6	400 - 600	8 - 12	200	
TCUL7	0,65	50 - 70	4 - 6	400 - 600	8 - 12	250	





It is a compound that has been developed to give a vulcanized rubber aspect. It's a good composite to get a reproduction of the mold. Being mainly recommended for larger soles due to the excellent surface finish provided by its properties.

Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Tear strength N/mm	Max abrasion	Additional Features
TMB01	0,90	40 - 85	4 - 6	400 - 600	8 - 12	220	
TMB02	0,96	40 - 85	4 - 6	400 - 600	8 - 12	220	
TMB03	0,99	40 - 85	4 - 6	400 - 600	8 - 12	250	
TCM1	0,97	40 - 85	4 - 6	400 - 600	8 - 12	220	





The thermoplastic elastomers to which the SEBS belong are materials with two phases: A flexible elastomeric rubber-like phase, which provides the typical properties of these, such as smooth touch, elasticity, flexibility, minimum temperature of use. And a rigid plastic phase that determines the hardness, recyclability and maximum temperature usage.





SEBS COMPOUNDS FOR FOOTWEAR

Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Tear strength N/mm	Max abrasion	Specific application	Additional Features
BMI38-58	0,92	58	6	600	12	220	Medical	
BMI39-55	0,98	55	7	800	11	250	Equitation	
BML10-60	1,12	60	4	600	25	-	Swimming fins	





PVC Compounds free of DEHP and Bisphenol A for injection of footwear articles. It's possible to select compounds for casual footwear and industrial/safety footwear that can match specific performance characteristics. Available in a range of colours, hardness, density and if need according EN ISO 20345 for safety footwear applications. With these Lacoflex compounds, it's easy to achieve the most demanding features, such as: resistance to hydrocarbons, anti-static, resistance to animal fats, resistance to low temperatures & resistance to blood.



Code	Density	Hardness ShA	Tensile strength Mpa	Elongation at break %	Max abrasion			Additional Features
PPC	1.23 - 1.26	50 - 75 15s	8 - 12,5	250 - 350	220 Casual footwear (sole, sole + upper)		EN ISO 20345	
PCN064	1.25 50 - 60 15s 10 400 210 Safety footwear - sole (with resistance the stand low temperatures)			EN ISO 20345				
PCN089	1.16 - 1.18	55 - 65 15s	8 - 10	400	210	Safety footwear - sole finishing (high resistance to hydrocarbons, animal fat, blood, animal remains, cold and anti-static)	EN ISO 20345	

* All the above properties must be confirmed in finished footwear. * The compounds can be free of Phthalates if requested: DEHP / DBP / BBP / DINP / DIDP / DNOP



COLOR VARIETY

ABRASION RESISTANT FREE OF OIL PHTHALATES RESISTANT

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The plastics industry has undergone major changes in recent years, mainly due to the growing awareness of consumers who are increasingly looking for sustainable and environmentally friendly solutions. This trend has encouraged the development of innovative materials, leading to a circular conception of the economy, as an alternative to the traditional linear economy.

Cabopol has at its disposal a set of sustainable solutions, which promote the development of the planet and the preservation of its environment. At Cabopol, offering environmentally friendly compounds has been defined as The new standard.





RECYCLED COMPOUNDS

BIOBASED COMPOUNDS

A MUCH NEEDED SOLUTION

Cabopol, have always been committed to offer sustainable solutions aligned with a circular economy model. To prove it, jump back in time approximately 10 years ago, when Cabopol launched Biomind, its very own brand of Biodegradable and Compostable compounds. At the time, it was the first company in the Iberian Peninsula that were able to provide this type of solutions. Fast-forward to today and the commitment is strong as ever.

Cabopol not only kept offering Biodegradable and compostable compounds, but it added 2 more branches of sustainable solutions. Compounds made with a percentage of recycled material (PIR & PCR) and biobased compounds.



RECYCLED COMPOUNDS

R-Lacoflex is the Cabopol brand of thermoplastic compounds that contains a percentage of recycled material, the source of which may be PCR (post-consumer recycled) and / or PIR (post-industrial recycled). Our recycled based compounds have the same properties as an ordinary plastic but stands out for using a percentage of recycled resources as raw materials.

R-Lacoflex & R-Polyprime gives a second life to plastic materials whose destination would be landfills or our oceans. Cabopol is actively working with its partners to develop solutions using recycled plastic from our oceans, actively contributing to the reduction of pollution levels.



CALCULATION OF THE RECYCLED CONTENT

There is still no standard or technology to make a qualitative determination of the amount of recycled material, so we are looking to work with partners that comply with ISO 14021: 2016 and ISO 15343 standards. The product's coefficient or percentage of recycled content is calculated: Mass of PIR & PCR, divided by the Total mass of the product, multiplied by 100. These materials are supplied by certified companies in the treatment of waste. Cabopol is actively working with its partners to develop solutions using recycled plastic from our oceans.



CERTIFIABLE QUALITY

At Cabopol laboratories, compounds are meticulously tested from development to production. To do this, Cabopol relies on the complete dedication of a vast team of technicians, who find solutions that exceed customers' expectations every day. Maintaining high levels of quality.

Adding to this, the raw Recycled material is supplied by Certified organizations, which guarantees complying compounds.

All compounds are RoHS, REACH and SVHC compliant, if requested.



LAC CFLEX COMPOUNDS

Code	Renewable source	Material	Hardness sH A 15′′	Density (g/cm3)	Tensile strength MPa	Elongation at break %	Tear strength N/mm	Additional Features
R-Lacoflex	10%	TPE	50 - 90	0,92 to 1,2	>4	>400	>20	ζ.
R-Lacoflex	25%	TPE	50 - 90	0,92 to 1,2	>4	>400	>20	<u>Z</u>
R-Lacoflex	30%	TPE	50 - 90	0,92 to 1,2	>4	>400	>20	Δ.
R-Lacoflex	50%	TPE	50 - 90	0,92 to 1,2	>4	>400	>20	<u>í</u>



SUSTAINABILITY WITHOUT COMPROMISING PERFORMANCE

There isn't one standard solution that can address everyone's sustainability goals, this is what drives Cabopol continuous work to deliver more options for customers. Depending on the properties of the recycled applied, Cabopol can design a tailored solution to fulfil all of the customers sustainable needs. By working in collaboration with Cabopol, clients can also be assisted to give a second live to their own thermoplastic residues with the aim of reducing waste.



POLYPRIME COMPOUNDS

Code	Renewable source	Material	Hardness sH A 15′′	Density (g/cm3)	Tensile strength MPa	Elongation at break %	Additional Features
R-Polyprime	10%	PVC	60 - 85	1,30 - 1,40	>6	>150	ζ.
R-Polyprime	25%	PVC	60 - 85	1,30 - 1,40	>6	>150	ζ.s



BIOBASED COMPOUNDS

Bio-Lacoflex is the Cabopol brand for biobased TPE compounds. These compounds stands out for using raw materials from renewable sources, such as: Soy residues, rice starch, corn & sugar cane. Bio-Polyprime is the Cabopol brand for PVC compounds produced with Renewable Attributed raw materials which are produced by replacing fossil feedstock with renewable feedstock^{*}, such as Bio-naphtha, Bio-methane and others. Also, these compounds are 100% recyclable, thus contributing to the sustainability of the planet and have the same properties as a standard plastic. *Biomass balance concept and third part certified process.



WHAT IS A BIOPLASTIC?

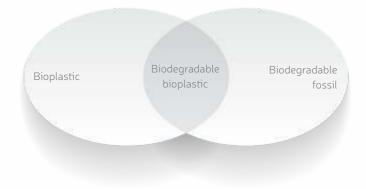
A biopolymer or bioplastic, is a polymer that has the same properties as ordinary plastic, but stands out for using as a raw material, renewable sources such as soy residues, rice starch, corn and sugar cane. But we must not confuse a bioplastic with biodegradable plastic. These are two different characteristics, its a mistake to think that a bioplastic is always biodegradable. It is also not correct to think that a biodegradable material must be of organic origin, because there are biodegradable plastics of fossil origin.

Cabopol with its Bio-Lacoflex and Bio-Polyprime lines has created compounds that has in its constitution polymers produced from renewable sources, thus contributing to the sustainability of the planet.

CIRCULAR ECONOMY SOLUTIONS

Cabopol works actively in the development of compounds that incorporate natural origin raw materials and substitute the fossil feedstock by renewable feedstock ,in order to increase the percentage of renewable carbon content and decrease the consumption of fossil feedstock.

With this solutions, its possible to maintain the characteristics of a standard PVC and TPE based compound, that can be used by itself or mixed with compounds of fossil origin.





OUTSTANDING BENEFITS

- Keep the characteristics of a fossil origin compound
- Contributes to reduce the consume of fossil feedstock
- Promotes the use of renewable feedstock

• Contributes to the reduction of the carbon footprint without competing with the food chain

- Individual adjustments of properties
- Fully recyclable
- Customizable features
- Processable on standard production equipment
- Several percentages of renewable raw material



LAC FLEX COMPOUNDS

Code	Renewable source	Material	Hardness sH A 15′′	Density (g/cm3)	Tensile strength MPa	Elongation at break %	Tear strength N/mm	Additional Features
Bio-Lacoflex	10%	TPE	50 - 90	0,92 to 1,0	>4	>400	>20	23
Bio-Lacoflex	18%	TPE	50 - 90	0,92 to 1,0	>4	>400	>20	Δ.
Bio-Lacoflex	30%	TPE	70 - 90	0,97	>4	>400	>20	23
Bio-Lacoflex	45%	TPE	70 - 90	0,97	>4	>400	>20	Ĺ.



POLYPRIME COMPOUNDS

Bio-Polyprime compounds have the same characteristics of the standard compounds. Depending on the hardness and the density Cabopol can propose compounds with maximum 80% of bio-attributed raw materials without compromising the quality and performance of the final product. With these type of compounds, independent of the Bio-attributed concentration, is not needed to adjust production parameters. Is expected to have Bio-Polyprime compounds with the performance of a Polyprime compound with fossil origin.



CUSTOMIZABLE FEATURES



RENEWABLE RESOURCES

In 2019 the land used to grow the materials necessary for the production of bioplastics amounted 0.79 million hectares, which represents less than 0.02% of the global agricultural area of 4.8 billion hectares. Even considering the market growth expected in the next five years, the land percentage for bioplastics will remain around 0.02 percent. Clearly showing that the materials used for the bioplastics, won't compete in the incoming years with the renewable feedstock for pasture, food and feed.

* Bioplastics land use is part of the 2% of Material use Source: European Bioplastics (2019), FAO stats (2017), nova-Institute (2019) & Institute for Bioplastics and Biocomposites (2019).

