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**SO.F.TER. GROUP
AT A GLANCE**

So.F.TER.



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PP

- Tecnoprene®** Glass fiber reinforced Polypropylene (PP/GF)
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Talcoprene® Talc filled Polypropylene (PP/TALC)
Carboprene® Calcium Carbonate filled Polypropylene (PP/CA)

PA 6, PA 66

- Nivionplast®** Polyamide compounds
Nylfor® Polyamide compounds
Nylfor R® Recycled textile Polyamide compounds

PBT

- Pibifor®** Polybutylene Terephthalate compounds (PBT)
Pibiter® Polybutylene Terephthalate compounds (PBT)
Pibiter HI® Polybutylene Terephthalate / Polycarbonate (PBT/PC)

PC/ABS

- Blendfor®** Polycarbonate / ABS compounds (PC/ABS)
Reblend® Polycarbonate / ABS compounds (PC/ABS)

ABS

- Abistir®** Acrylonitrile-Butadiene-Styrene compounds (ABS)
Retelan® Acrylonitrile-Butadiene-Styrene compounds (ABS)

PC, PS, SAN, PPE

- Cabofofor®** Polycarbonate compounds (PC)
Stirofor® High-impact Polystyrene compounds (HI-PS)
Sanfor® Styrene-Acrylonitrile Copolymer compounds (SAN)
Norfor® Polyphenylene Oxide compounds (PPE)



COMPANY

"We strive to offer our customers innovative solutions through a wide portfolio of products and services at a global level"

PRODUCT RANGE

- The widest range of products in Europe
- One single partner for hard/soft applications

STATE-OF-THE-ART-TECHNOLOGY

- Fully automated processing product
- Cutting edge technologies

GLOBAL PRESENCE

- 7 companies and over 50 export destinations worldwide

CONTINUOUS INNOVATION

- SO.F.TER. Research Center promotes and coordinates the technological innovation in all business areas
- Integrated approach and focus on hard/soft systems

ENGINEERING

3R – benefits for the customer:

- **Reduction of time-to-market:** from the design to the object quickly and well
- **Reduction of costs** thanks to the correct design of the mould and optimized injection flows
- **Reduction of risks** caused by production faults

WORLDWIDE

SO.F.TER. US

Located: Lebanon, TN

Production: TPE, ETP

Capacity: 23,000 tons/year

SO.F.TER. MEXICO

Located: Silao, Guanajuato

Production: TPE, ETP

Capacity: 20,000 tons/year

SO.F.TER. BRASIL

Located: Campo Bom, RS

Production: TPE, ETP

Capacity: 10,000 tons/year

SO.F.TER. SPA

Headquarters

Located: Forlì, Italy

Production: TPE, ETP

Capacity: 120,000 tons/year

SO.F.TER. TECNOPOLIMERI

Operations: Ferrara, Italy

Production: ETP

Capacity: 25,000 tons/year

POLYMIA

Located: Ferrara, Italy

Polymerization plant (PE, TPC)

Capacity: 22,000 tons/year

P.GROUP SO.F.TER.

DEUTSCHLAND

Located: Filderstadt, Stuttgart

Sales Office

Growing global



A close-up photograph showing a white, curved plastic component, possibly a wheel or a part of a machine, resting on a black, granular surface. The surface has a fine, pebbled texture. A white, cylindrical object is partially visible on the left side. In the upper right corner, there is a bright yellow triangular shape. A white rectangular box is overlaid on the image, containing the text "THERMOPLASTIC ELASTOMERS".

THERMOPLASTIC ELASTOMERS

	PIBIFLEX®	FORPRENE®	LAPRENE®	SOFPRENET®	FORFLEX®
<i>Polymer</i>					
base Polymer	TPC	TPV	TPE-S (SEBS)	TPE-S (SBS)	TPO
<i>Processing technology</i>					
injection moulding	•	•	•	•	•
extrusion	•	•	•	•	•
blow moulding	•	•			•
rotational moulding/slush	•		•		
<i>Technical characteristics</i>					
hardness range	25D ÷ 70D	20A ÷ 60D	2A ÷ 50D	25A ÷ 90A	80A ÷ 65D
low temperature limit	-45 °C	-40 °C	-50 °C	-50 °C	-40 °C
high temperature limit (continuous)	150 °C	130 °C	120 °C	60 °C	70 °C
<i>Adhesion on polymers</i>					
adhesion (standard grades)	PC, PC/PBT, PC/ABS, PBT, EVA, TPU	PP	PP	PP	PP
adhesion (special grades)	SEBS		ABS, PC, PC/ABS, PA6, PA66, PMMA, TPU, PBT, TPC, PS	PS	
<i>Ageing</i>					
UV ageing, weathering resistance	☺	☺	☺	☹	☺
<i>Chemical resistance</i>					
hydrocarbons	☺	☺	☹	☹	☺
oils	☺	☺	☹	☹	☺
greases	☺	☺	☹	☹	☺
aqueous fluids	☺	☺	☺	☺	☺
detergents	☺	☺	☺	☹	☺
acids	☺	☺	☺	☹	☺
bases	☺	☺	☺	☹	☺
salt solutions	☺	☺	☺	☺	☺
<i>Special Grades</i>					
flame retardant grades	•	•	•		
traslucent grades		•	•	•	•
low fogging grades	•	•	•		•
non staining grades	•	•	•	•	•
food contact grades	•	•	•	•	•
<i>Main Applications</i>					
	AUTOMOTIVE	AUTOMOTIVE	BUILDING	FURNISHING	BUILDING
	INDUSTRIAL	APPLIANCES	SPORTS & LEISURE	HOUSEWARE	INDUSTRIAL
	SPORTS	BUILDING	AUTOMOTIVE		AUTOMOTIVE

	SOFPRENE®	SOFPRENE P®	SOFPRENE Z®	SOFPUR®
<i>Polymer</i>				
base polymer	SBS	TPO	SEBS	TPU
<i>Processing technology</i>				
injection moulding	•	•	•	•
<i>Technical characteristics</i>				
hardness range	35A-95A	30A-95A	40A-90A	65A-95A
low temperature limit	-20 °C	-20 °C	-20 °C	-20 °C
high temperature limit	50 °C	50 °C	50 °C	50 °C
<i>Range & characteristics</i>				
cork-like effect	•		•	
crêpe-like type	•			
crystal and traslucent grades	•	•	•	
expanded grades	•			
extra-light	•			
extra mat surface	•	•	•	•
excellent abrasion resistance	•	•	•	•
wide colour range	•	•	•	•
<i>Workings</i>				
gluing			NO	
<i>Main Applications</i>				
	ALL KIND OF FOOTWEAR SNOW BOOTS CROSS-COUNTRY BOOTS	SKI BOOTS	CLOGS BOOTS & WELLINGTONS STITCH & TURN SHOES	ALL KIND OF FOOTWEAR



® holo 

- Complies with the requirements of:
- FIFA Quality Concept
 - Dutch Soil Quality Decree(Holo SP-D)



KEY FEATURES

Cylindrical pellet shape with hollow space inside the granules provides:

- Shock absorption function
- Lightweight: allows to reduce up to 35% the overall weight of infill material
- Natural feeling
- High contribution to sport performance
- Anti-compaction shape
- Totally safe for humans and environment
- Fully recyclable



® terra 

- Complies with the requirements of:
- FIFA Quality Concept
 - Dutch Soil Quality Decree

® forgrin 

- Complies with the requirements of:
- FIFA Quality Concept
 - LND 2008 Regulation

KEY FEATURES

- Cylindrical solid TPE pellet
- Consistent sport experience
- Anti-compaction pellet shape
- Totally safe for humans and environment
- Fully recyclable

TPE for turf infill

ENGINEERING THERMOPLASTICS



	TECNOPRENE®	POLIFOR®	TALCOPRENE®	CARBOPRENE®
<i>Polymer</i>	PP/GF	PP compounds	PP/TALC	PP/CA
PP homopolymer	•	•	•	•
PP copolymer	•	•	•	
<i>Processing technology</i>				
injection moulding	•	•	•	•
extrusion grades	•	•		
blow moulding grades	•	•		
rotomolding	•			
<i>Range</i>				
glass fibre	10% ÷ 50%	10% ÷ 50%		
talc filled		10% ÷ 60%	20 ÷ 40%	
calcium carbonate		20% ÷ 70%		30 ÷ 40%
glass beads		20% ÷ 30%		
high crystallinity + glass fibre	•			
glass + mineral	•	•		
elastomer modified	•	•		
food contact	•	•		
high fluidity	•	•		
conductive	•	•		
flame retardant		•		
aesthetic grades		•		
high density		•		
sound deadening		•		
coloured	•	•		
<i>Characteristics</i>				
impact resistance	•••	••	•	•
thermal ageing & resistance	•••	••		
chemical resistance	•••	••		
UV stabilization	available on request			
detergent stabilization	available on request			
<i>Main Applications</i>	AUTOMOTIVE, ELECTRICAL & ELECTRONIC APPLIANCES, HOUSEHOLD APPLIANCES, INTERIOR DESIGN			

	NIVIONPLAST®	NYLFOR®	NYLFOR R®
<i>Polymer</i>			
PA6	•	•	•
PA66	•	•	•
PA66/PA6	•	•	
<i>Processing technology</i>			
injection moulding	•	•	•
extrusion grades	•		
<i>Range</i>			
unreinforced	•		•
glass fibre	20% ÷ 60%	10% ÷ 60%	15% ÷ 30%
glass beads	30%	30%	
elastomer modified	•	•	•
flame retardant (UL approved)		•	
aesthetic grades		•	
mineral filled		•	
conductive		•	
lubricated		•	
coloured	•	•	
<i>Characteristics</i>			
impact resistance	•••	••	•
high temperature resistance	••	••	••
chemical resistance	••	••	••
UV stabilization	available on request		
<i>Main Applications</i>	HOUSEHOLD APPLIANCES, AUTOMOTIVE, SPORT & LEISURE, ELECTRICAL & ELECTRONIC		

ENGINEERING THERMOPLASTICS

	PIBITER®	PIBIFOR®
<i>Polymer</i>		
PBT	•	•
PBT + PET alloy	•	
PBT + PC alloy	•	
<i>Processing technology</i>		
injection moulding	•	•
<i>Range</i>		
unreinforced	•	
glass fibre	10% ÷ 30%	20% - 50%
flame retardant	0% ÷ 30% GF	0% - 30% GF
glass beads		30%
elastomer modified		•
<i>Characteristics</i>		
impact resistance	•	••
high temperature resistance	V0	V0
chemical resistance	••	••
<i>Main Applications</i>		

ELECTRICAL & ELECTRONIC, AUTOMOTIVE

	BLENDFOR®	REBLEND®
<i>Polymer</i>		
PC/ABS alloy	•	•
<i>Processing technology</i>		
injection moulding	•	•
<i>Range</i>		
standard (unreinforced)	•	•
glass fibre	10%	
glass fibre + talc		•
mineral filled		20%
flame retardant	V0	
<i>Characteristics</i>		
impact resistance	••	••
high temperature resistance	•	•
aesthetical properties	•••	•••
<i>Main Applications</i>		

ELECTRICAL & ELECTRONIC,
HOUSEHOLD APPLIANCES

	ABISTIR®	RETELAN®
<i>Polymer</i>		
ABS	•	•
<i>Processing technology</i>		
injection moulding	•	•
<i>Range</i>		
standard (unreinforced)	•	•
glass fibre	17%	17%
glass beads	20%	
flame retardant	V0	V0
<i>Characteristics</i>		
Impact resistance	•	••
high impact+ high flow		•
high temperature resistance	•	••
aesthetical properties	•••	•••
<i>Main Applications</i>		

HOUSEHOLD APPLIANCES

	CABOFOR®	STIROFOR®	SANFOR®	NORFOR®
<i>Polymer</i>				
polymer	PC	HI-PS	SAN	PPE
<i>Processing technology</i>				
injection moulding	•	•	•	•
<i>Range</i>				
unfilled	•	•		•
glass fibre	10% ÷ 30%		10 ÷ 35%	10 ÷ 30%
flame retardant	•	•		•
elastomer modified		•		
aesthetic grades	•	•	•	
high fluidity	•			
coloured	•	•	•	•
<i>Characteristics</i>				
impact resistance	••	••	••	••
thermal ageing & resistance			•	••
chemical resistance			•	
transparency	••		••	
aesthetic properties	••	••	••	
dimensional stability	••	••	••	••
<i>Stabilization</i>				
UV stabilization	available on request			
detergent stabilization				

PAVPRENE®

Bitumen modifier

Pavprene® is the trade name of the polymeric materials developed by SO.F.TER. for the modification of road bitumen.

Modified bitumen is increasingly used in road paving because it significantly improves the quality, durability and performance of the road surface and helps to reduce the problems of wear and maintenance caused by heavy traffic.

Benefits

Compared to traditional bitumen, modified bitumen offers the following benefits:

- Higher viscosity of the bituminous mix and increase in the cohesion and adhesion of inert elements
- Improved ageing resistance and durability of the road surface
- Improved resistance to ruts and lower deformability
- Higher resistance to weight and strain
- Higher stability of the asphalt and improved behaviour both at high and low temperatures

Range

The range includes two product families having different molecular structure:

- LINEAR STRUCTURE: allows to obtain bituminous blends that offer lower viscosity, improved processability and storage stability
- RADIAL STRUCTURE: enables to obtain bituminous blends with improved physico-mechanical properties