taro plast

THERMOPLASTIC ELASTOMERS

Styrenic compounds

nilflex® S series, SBS
nilflex® SH series, SEBS

Thermoplastic vulcanizate

taroprene® series

nilflex®s nilflex®sh

THERMOPLASTIC COMPOUNDS BASED ON SBS and SEBS STYRENIC ELASTOMERS FOR TECHNICAL APPLICATIONS

NILFLEX®S and ***NILFLEX®SH*** *series*

Thermoplastic styrenic compounds also known as TPS or TPE-S.

They differ in the nature of the elastomeric part of the recipe. They are provided in spherical granules to facilitate rolling and hopper feeding.
Typical supply packaging is in 25 kg bags. Big bags or octabins available on request.

NILFLEX®S *series*.

Styrene-Butadiene-Styrene (SBS) block copolymer.
Butadiene block confers flexibility and elasticity.
Styrenic block provides rigidity.

• produced in standard grades and in custom made grades for any typical industrial application.

• processable by means of all common industrial processes: injection molding, extrusion, blow molding and calendering.

• excellent elastic performances in a wide Temperature range (-55°C/+ 70°C).

• limited weathering stability (UV and Ozone) which can be improved by means of special additivation even though they are not especially suited for outdoor applications.

• widely used in different market segments where high temperature resistance or weathering resistance (UV, Ozone) is not an issue like toys, gaskets for interior, caster wheels, bath mats etc.

NILFLEX®SH *series*.

Styrene-Ethylene/Buthylene-Styrene block copolymer.
Ethylene/Buthylene intermediate block confers flexibility and elasticity.
Polystyrene blocks at both ends confers rigidity.

• Produced in standard grades and in custom made grades for any typical industrial or automotive application.

• Processable by means of all common industrial process: injection molding, extrusion, blow molding and calendering.

• Excellent elastic performances and maintenance of mechanical properties in an extremely wide Temperature range (-55°C/+ 90°C).

• Excellent resistance to weathering (UV , Ozone) which together with their outstanding ageing properties make them particularly suited for outdoor applications.

• Widely used in different market segments where high temperature resistance or weathering resistance (UV, Ozone) is an important issue like automotive, construction, electrical, leisure etc.

NILFLEX®S and ***NILFLEX®SH*** *series*

Recyclable: regrinded sprues or production rejects can be mixed to virgin material and reused without influencing the properties of the final part with a maximum recommended ratio of:
NILFLEX S: 10 %
NILFLEX SH: 20 %

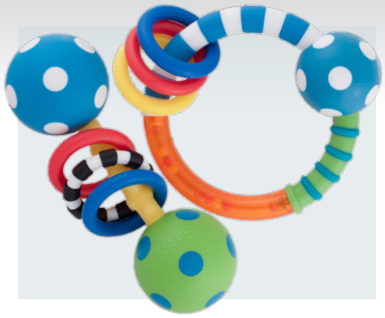
• Resistant to acids, bases and in general to aqueous solvents.

• Limited resistance to contact with polar solvents, mineral oils and fatty substances. NILFLEX SH are anyhow more resistant to the above mentioned substances than NILFLEX S.

• Supplied in black and natural color.

• Easily colorable by means of Olefinic masterbatches.

• Custom colored grades on request
(L,a,b-Pantone-RAL match)

NILFLEX®S and ***NILFLEX®SH*** *series*

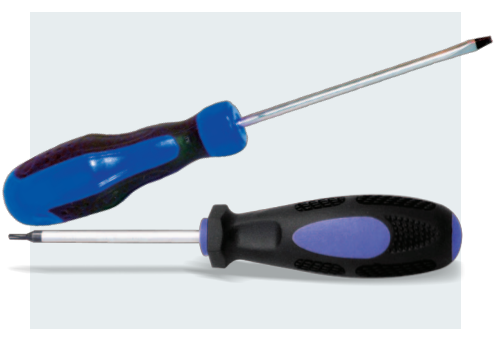
Product features:

NILFLEX®S and ***NILFLEX®SH*** *series* are available in a complete range of different product features for any typical processing and a wide range of applications.

All families can be generally made available for injection molding, extrusion, blow molding.

In the below table are listed the most commonly available product features. Listed features, when technically possibile, can be combined to match customer needs.

Standard grades
Heat Stabilyzed
UV/Ozone
High viscosity
Fast cycle (Low viscosity)
Copper protected
Food contact
Low fogging
Light color
Oil free
Flame retardant with Halogen
Flame retardant Halogen free
Transparent
Bonding grades (to polar substrates like
PA, PC etc.)
Conductive

Product nomenclature:

NILFLEX®S and ***NILFLEX®SH*** *series* nomenclature can be decoded as follows (from top to bottom).

	NILFLEX	
S	SH	SHT
	A/D	
	XX	
E	M	B
C	N	R
	ZZZ	
	YY	
	****	

Legenda:

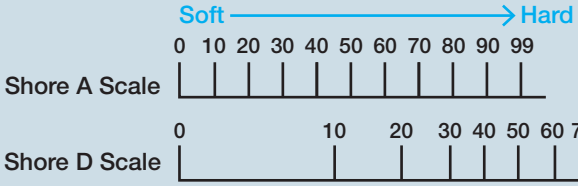
S = SBS SH = SEBS SHT = SEBS Transparent
A/D = Hardness ShA or ShD
XX = Hardness value
E = Extrusion M = Injection Molding B = Blow Molding
C = Filled grades N = Unfilled grades R = Industrial grades
ZZZ = Recipe number (3 digits)
YY = Color (00=nat, 99=black)
**** = Additional features

Examples:

NILFLEX S A50MC00100 NAT
SBS (S), ShA50, Injection Molding (M),
Filled (C), Recipe 001, Natural color (00)

NILFLEX SH D45EC00399 BLACK
SEBS (SH), ShD45, Extrusion (E),
Filled (C), Recipe 003, Black color

Hardness Scale



taroprene®

THEMOPLASTIC COMPOUNDS BASED ON PP AND DYNAMICALLY VULCANIZED EPDM

TAROPRENE®

Taroplast trade name for thermoplastic compounds based on PP-EPDM. The EPDM elastomeric portion is dynamically vulcanized during production process.
Taroprene is therefore classified as TPV:
Thermoplastic Vulcanizate.

• Produced in spherical granules to facilitate rolling and hopper feeding.

• Typical supply packaging is in 25 kg bags. Big bags or octabins available on request.

TAROPRENE®

Combines the typical performance of a thermoset rubber together with the advantages of a thermoplastic compound.

• Supplied in a ready-to-use fashion and does not require any post-vulcanization treatment.

• Available in standard grades and custom made grades for any typical industrial or automotive application or requirement.

• Mainly delivered in black and natural colour , Taroprene can be easily colored by means of specific olefinic pigments.

• Colored grades commonly available .

• Color match available on request.
(L,a,b-Pantone-RAL match)

TAROPRENE®

Recyclable: regrinded sprues or production rejects can be mixed up to 20 % to virgin material and reused without influencing the mechanical properties of the final part.

• Excellent characteristics in a wide range of temperature (-40°C and above 130°C).

• Available in a wide range of ShA/ShD hardnesses

• Easily processable by means of the most common transformation techniques: Injection molding, extrusion, blow molding, calendering…

TAROPRENE® product features:

• Suitable for a wide range of industrial and automotive applications due to the outstanding resistance to ozone and atmospheric ageing, as well as to their excellent mechanical characteristics.

• Typically resistant to a wide range of polar solvents, acid and basic solutions.

• Due to its chemical affinity to polyolefinic polymers it easily bonds to Polypropylene or Polyethilene without the need of adhesives or surface treatment.

• Available in a wide range of product features.
Commonly available features:
standard heat stabilization, High
Heat stabilization, UV stabilization.

TAROPRENE® grades , in addition to standard additivation can be “custom made” to match specific requirements like for example Flame retardancy , Low friction and many others.
In the following table are listed the most commonly available product features.
Listed features, when technically possibile, can be **combined** to match customer needs.

TAROPRENE® series

DESCRIPTION	Hardness Range Shore (3")	Density (gr/cm³)
Standard Grade	ShA25/D60	0,96
Heat stabilized	ShA25/D60	0,96
Copper/metal stabil.	ShA25/D60	0,96
UV stabilized	ShA25/D60	0,96
Light natural color	ShA25/D60	0,96
Filled Grade	ShA30/D60	1,05 -1,15
Flame retardant (Halogen)	ShA60/D60	1,1-1,25
High Flow	ShA25/D60	0,96
Food Contact	ShA50/A80	0,96
Glossy	ShA25/D60	0,96
Low friction	ShA25/D60	0,96
Low Oil	On req.	0,96

Product nomenclature:

TAROPRENE® series nomenclature can be decoded as follows (from top to bottom).

	TAROPRENE		
	1	2	
	A	D	
	XX		
E	M	B	C
1 5	2 6	3 7	4 C
N S A	M F R	E L X	C T Z
	YY		

Legenda:

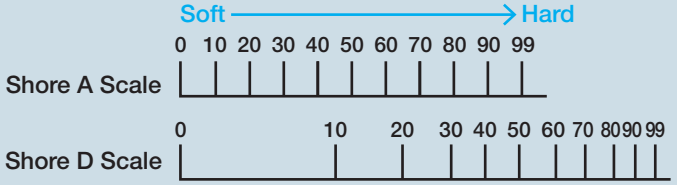
TAROPRENE = Brand name
1 = Standard 2 = Very light natural color
A/D = Hardness ShA or ShD
XX = Hardness value.
E = Extrusion M = Injection molding B = Blow molding C = Calendering
1, 2, 3, 4, 5, 6, 7 = Special additivations. C = Cost effective (min. filled)
N = Standard grade
M = High Flow L = Light natural color E,C, S, F, T, A, R, X, Z = Special features
YY = Color (00= nat, 99= black)

Examples:

TAROPRENE 1 A 65 E1N 99
TPV SERIE 1, ShA 65, Extrusion (E), Standard heat stabilization (1), Standard grade (N), black (99)

TAROPRENE 1A80 M6N 00 V0
TPV SERIE 1, ShA 80, Injection molding (M), Flame retardant, Standard grade (N), natural color (00) V0

Hardness Scale



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Stand of the information 03.2014