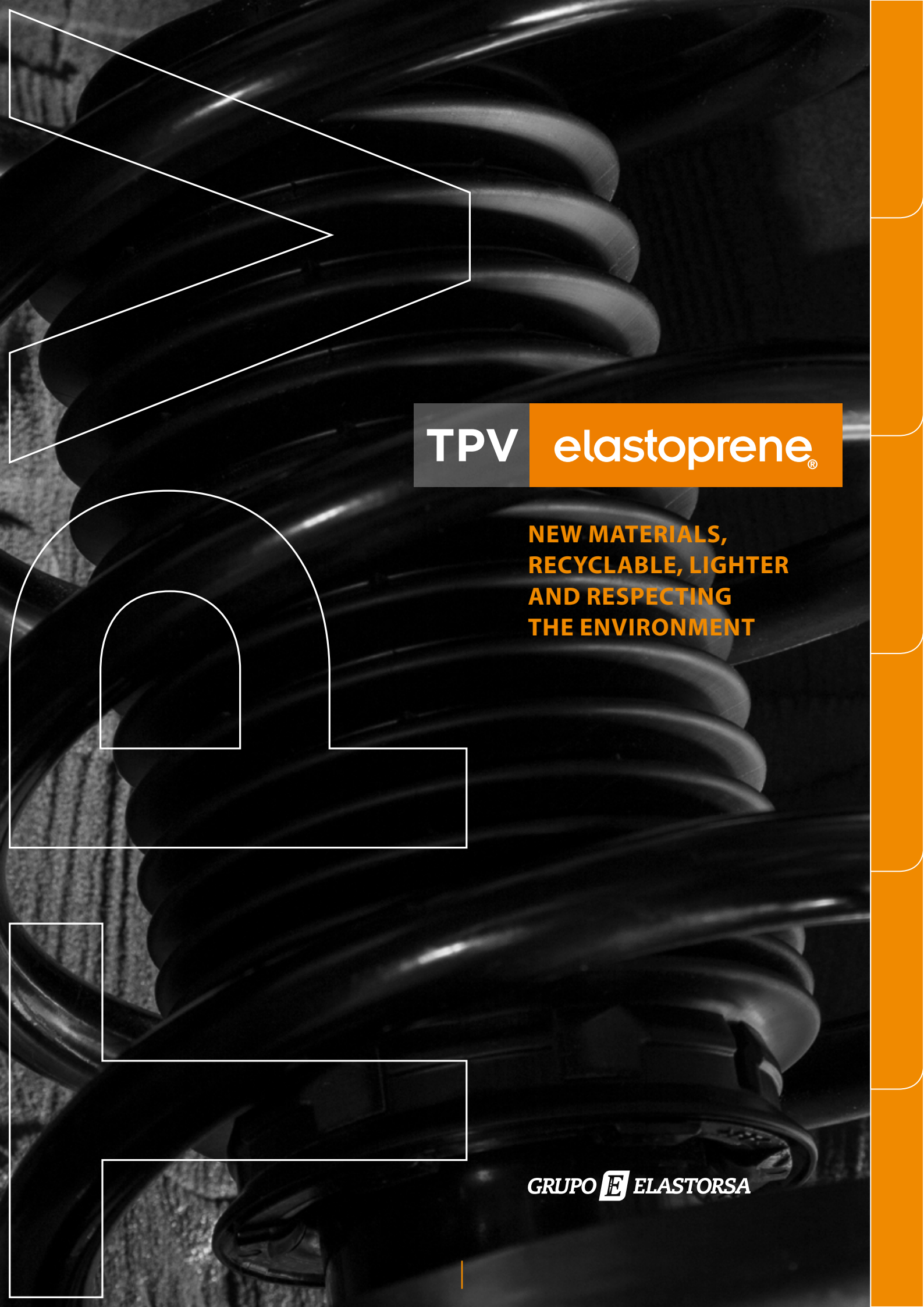




TPV

elastoprene®

**NEW MATERIALS,
RECYCLABLE, LIGHTER
AND RESPECTING
THE ENVIRONMENT**

GRUPO  ELASTORSA



TPV elastoprene®

In the Grupo Elastorsa we look to the future, researching and developing new materials which are lighter, easy to process, recyclable and environment-friendly.

The latest fruit of our research is our TPV ELASTOPRENE®. TPV is a thermoplastic elastomer or TPE. Its formulation is based on polypropylene and EPDM rubber but, in the case of TPV ELASTOPRENE®, the EPDM is dynamically vulcanized.

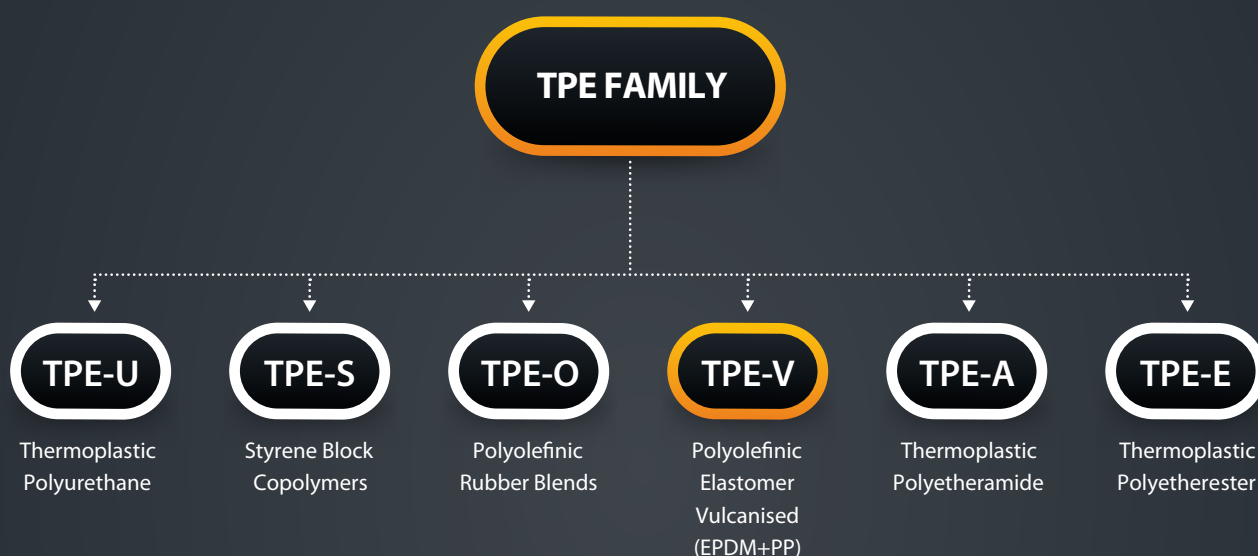
TPV ELASTOPRENE® is available in pellets format in a wide range of hardnesses and in different forms of packaging, according to customer requirements. It can be transformed with standard plastic (polypropylene) machinery. There are grades suitable for the different transformation processes: extrusion, injection molding and extrusion-blow molding.

TPV ELASTOPRENE® can be used to make parts with elastic properties similar to vulcanized rubber and superior to those of traditional plastics. It can be recycled and reused at the point of transformation with an important reduction in the weight of the piece and a clear improvement in the profitability of the processes.

GENERAL INFORMATION

CHARACTERISTICS AND PROPERTIES

TPV ELASTOPRENE® is a mixture of polypropylene and dynamically vulcanized EPDM rubber identified as TPV-(EPDM+PP) according to the ISO 18064 standard, which is used to make pieces with properties similar to those made with rubber and superior to others made with traditional plastics.



- Its main characteristic is its elasticity and its good response to deformation when subjected to high temperatures.
- Service temperatures of up to 130°C can be reached in the hardest compounds.
- It has a very low brittleness temperature, which can reach as low as -60°C in the softest compounds.
- It is highly resistant to ozone, UV light ageing and attack by different chemical agents such as acids, alcohol, detergent, bleach and water. Like EPDM rubber, TPV swells up when in contact with mineral oils and fats.
- It has high thermal and electrical insulation ($>10E14 \Omega\text{cm}$) and a slow combustion speed ($<40 \text{ mm/min}$).
- Standard Elastoprene grades have a low density of approximately 0.96 g/cm^3 . In order to obtain more economical versions, density can be increased, so enabling costs to be reduced while maintaining its good elastic properties.
- Raw materials were carefully selected to comply with the requirements of the European REACH and ROHS regulations (2011/65/EC).
- A material safety data sheet (MSDS) is available for all grades in accordance with CLP (Classification, Labelling and Packaging) requirements.

PROCESSING

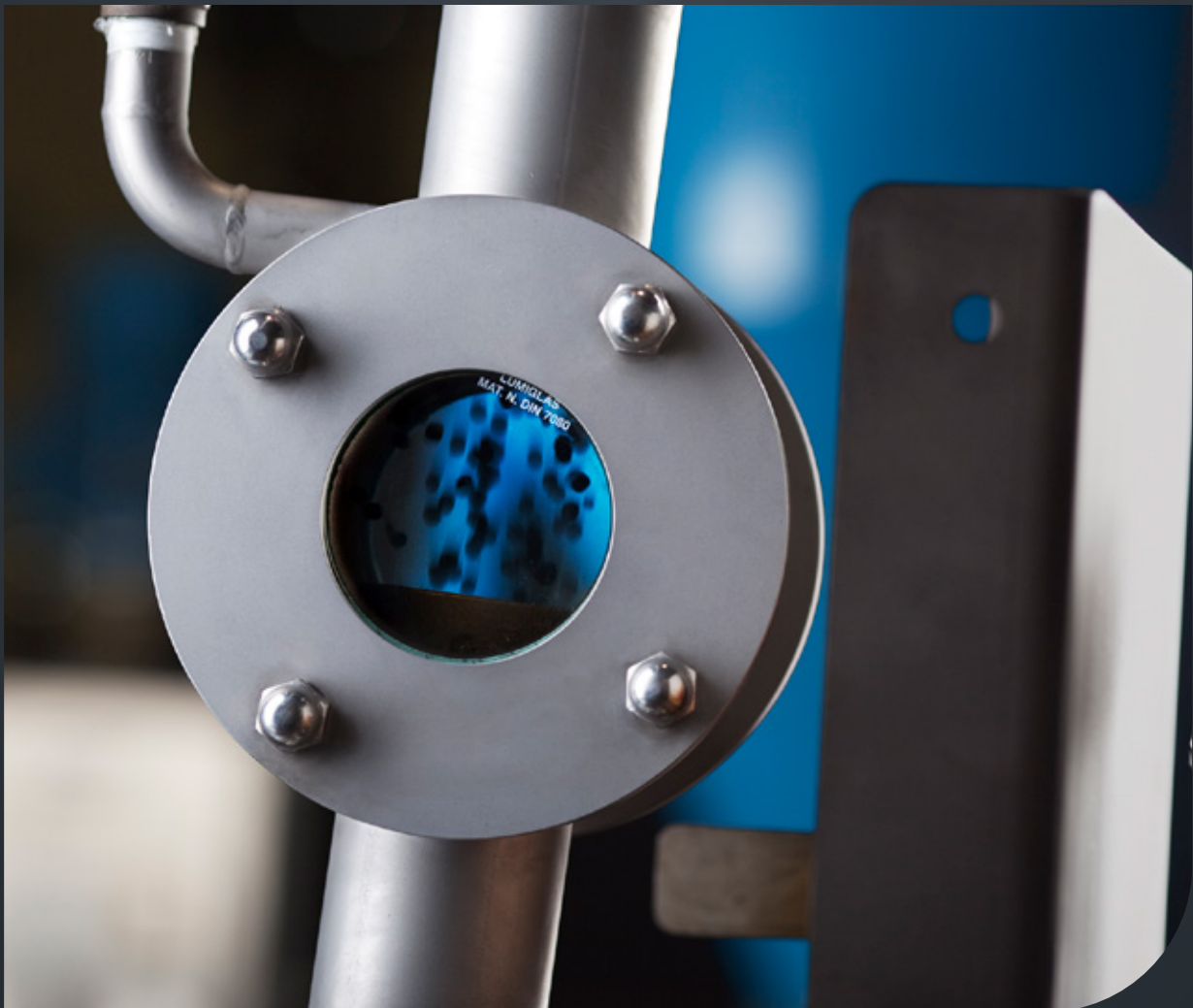
It is supplied in pellets format so that it can be transformed using traditional plastic machinery.

We recommend using standard configurations for polyolefins, with the best option being polypropylene processing.

The rheology of the compounds is adapted for each type of transformation process. The high viscosity of the TPV, due to the EPDM rubber particles inside the thermoplastic matrix, can be reduced by increasing the shear during its transformation. Increases in velocity are more influential than increases in temperature.

Due to its hygroscopic nature, we recommend that it be dried prior to processing. Materials stored in open packaging or for a long time will require a longer drying period, so as to enable them to eliminate the humidity absorbed from the atmosphere completely.

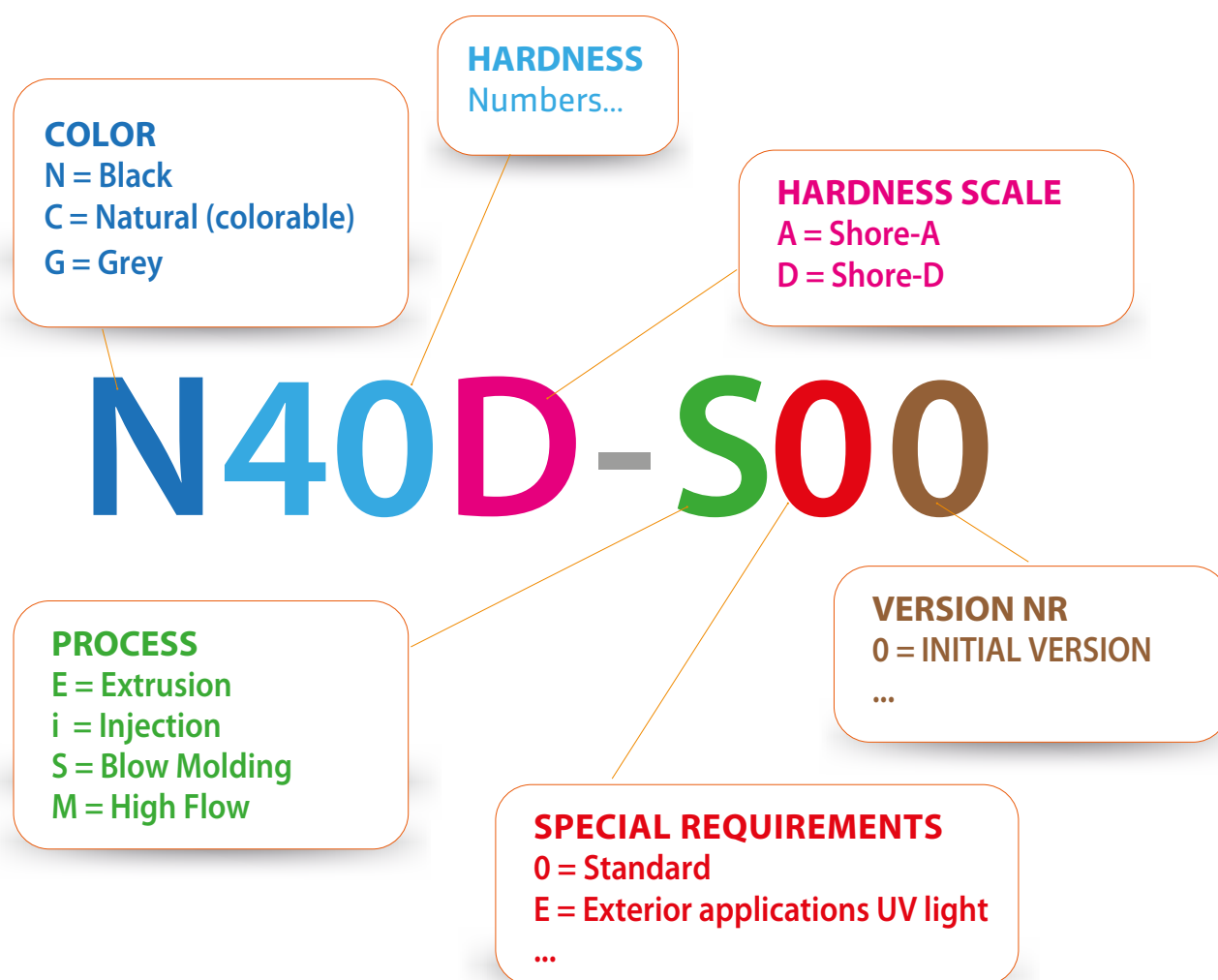
This material is totally recyclable and reusable, by mixing ground up material with the original material.



GENERAL INFORMATION

REFERENCE CODING

Example of coding in the reference for one of our products.



* All the data and information supplied here have been provided in good faith, purely for information purposes, and have no contractual value. They must therefore be considered as merely illustrative values, obtained from previous experiences, which may vary in future experiences.

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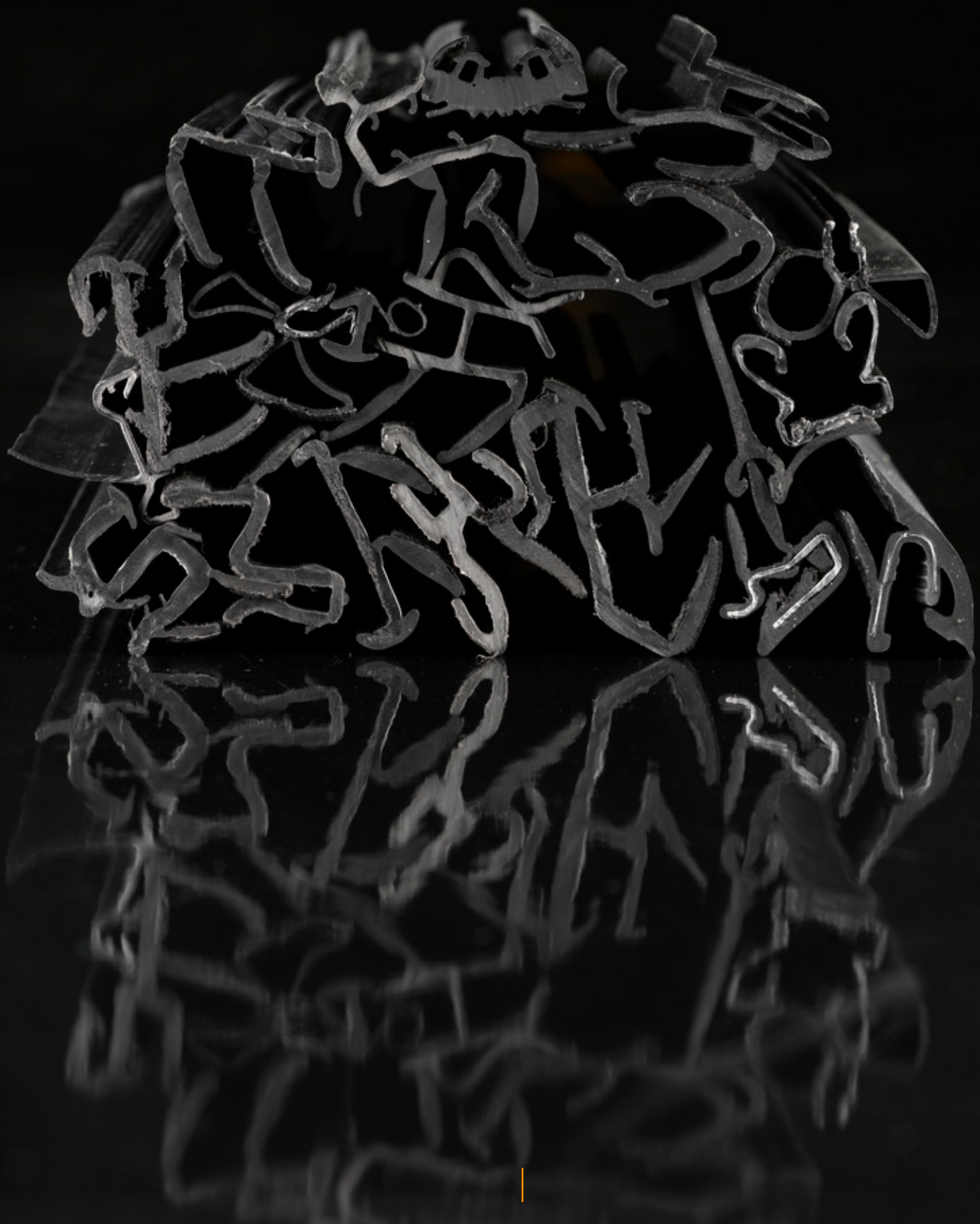
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LOCATION

TPV elastoprene®

Grupo Elastorsa has factories in Europe where it develops its compounds and carries out customer service, production, quality control and distribution to its customers in Europe, North Africa, Asia and America.





EXTRUSION



PROCESSING

SETTINGS	UNITS	TYPICAL VALUE
Processing range	°C	160 + 200
Temperature range in Head / Die	°C	200 + 220

WE RECOMMEND THAT IT BE DRIED FIRST SO AS TO PREVENT SUPERFICIAL DEFECTS IN APPEARANCE DUE TO PORES AND BLISTERS:

Pre-drying time (recommended)	Hours	2 + 4
Pre-drying temperature	°C	80

In order to ensure correct processing, we recommend a screw of between 20D and 30D long, with a compression ratio of between 1:2 and 1:3, suitable for polypropylene. Greater uniformity of the extruded flow can be achieved with longer screws.

The high viscosity of TPVs in molten state makes it easier to maintain the geometry of the profile from the die to the calibrators. Viscosity can be reduced by increasing screw speed and to a lesser extent by increasing the temperature. The product can be reused by mixing ground up material (up to 20% of total) with original material.

EXTRUSION

AUTOMOTIVE

The excellent properties of this material make it ideal for satisfying the demanding requirements of the **automotive manufacturing sector**, with applications for both the interior and exterior of the vehicles for which there are grades with improved resistance to UV light.

Its most important application is **extruded and co-extruded sealing profiles with TPV or PP with mineral loads**. It can be used to make products with flocked finishes, adhesive tapes, over-molded plugs, etc...

TPV ELASTOPRENE materials are registered in the IMDS web database to be included in automobile components. They comply with the End-of-life Vehicles Directive (2000/53/EC).

The main car manufacturers have created specific standards for TPV (EPDM+PP) materials, such as:

VW - 50123

FORD - WSD-M2D378-A1 & WSS-M2D378-B1

PSA - B62 0300 & B64 0100

RENAULT - 00-10-420 & 03-10-104

GM - QK 0035xx

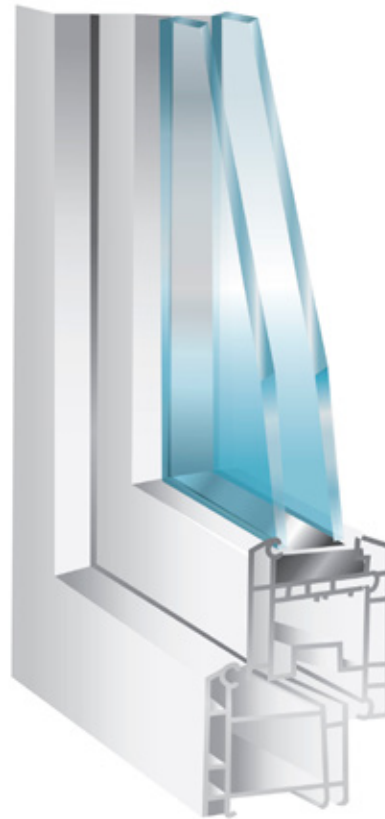
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CONSTRUCTION

In the construction sector, it is used in the manufacture of weatherstrips and gaskets for doors and windows by extrusion and co-extrusion with TPV or PP.

As well as the normal black color, some grades are also available in natural color, or in grey or white.



OTHERS

TPV Elastoprene can be used in a wide variety of sectors for a multitude of applications such as:

- **Consumer goods:** tool handles, wheels, toy seals, ...
- **Electrical:** insulation of low voltage cables, protection of cables, insulation in batteries, ...
- **White goods:** door seals, drain pipes in washing-machines, guards and trim, ...
- **Industrial parts:** seals in solar panels, container seals, ...



N55A-E00

TPV **elastoprene®**

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	56
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	4,5
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60



N55A-EE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	56
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	4,5
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60

N55A-DE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	56
Density	ISO 1183 Method A	g/cm ³	1,06
Tensile Strength	ISO 37	MPa	3,5
Elongation at Break	ISO 37	%	390
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	4
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Coefficient of Friction	ISO 8295		0,45
Special Characteristics / Applications	Sliding, low coefficient of friction. Economical.		

C55A-E00

TPV elastoprene®

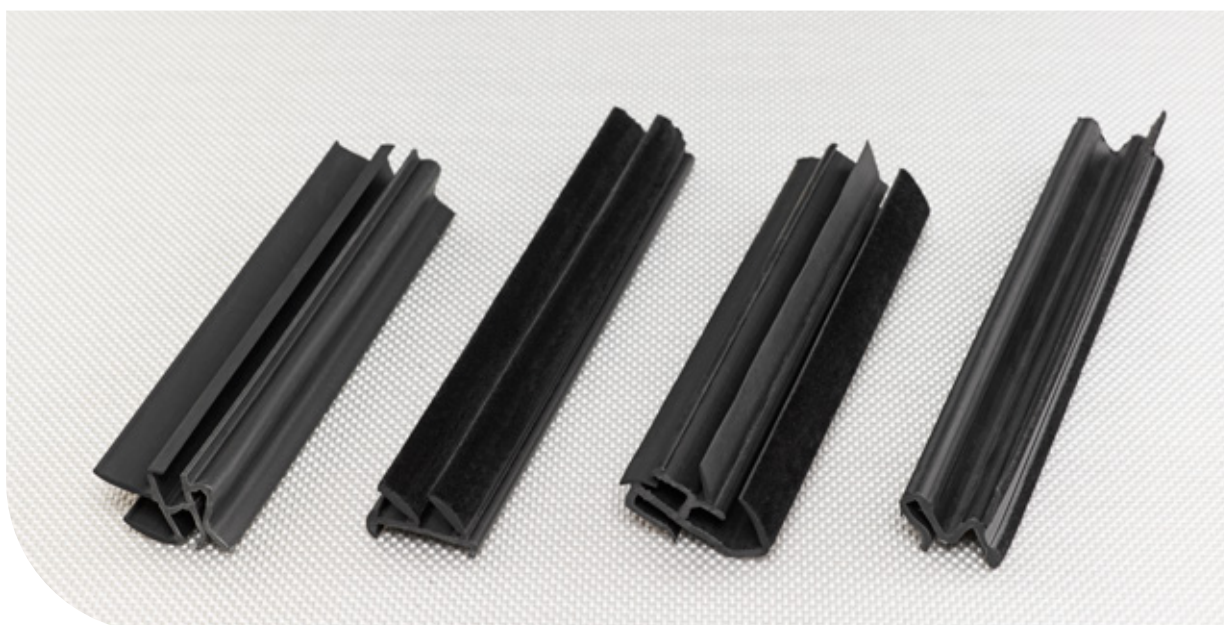
FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	56
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5,3
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60

N58A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	58
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	4,5
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	33
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60

N58A-EE0**TPV** elastoprene®

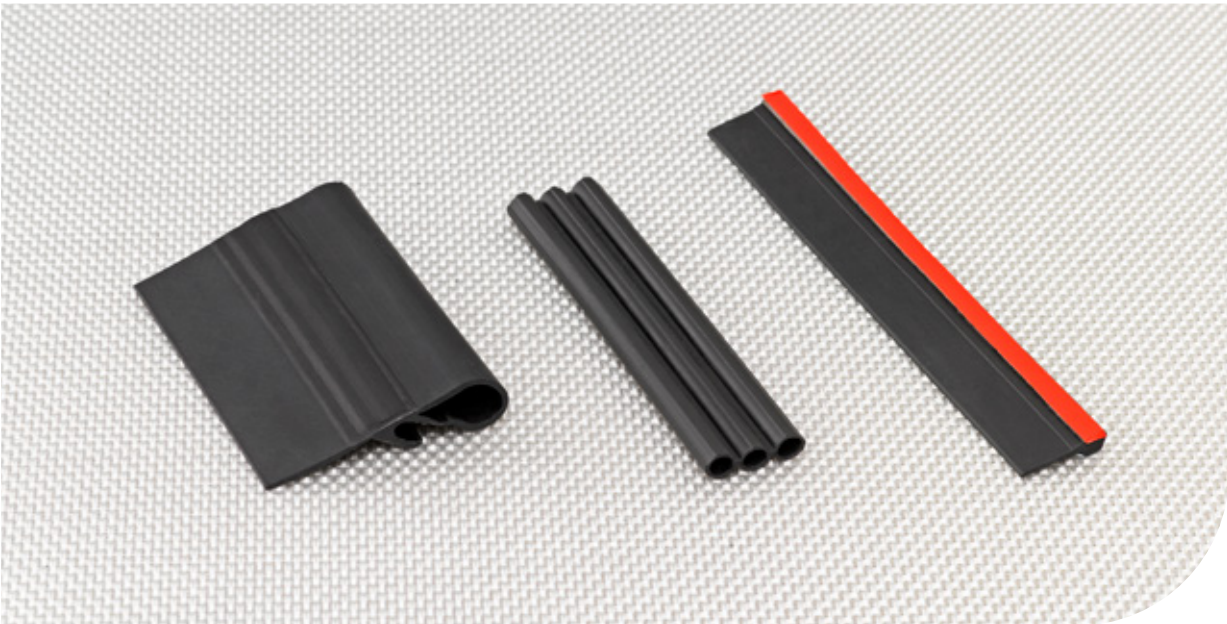
FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	58
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	33
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60



N58A-EE3

TPV **elastoprene®**

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black-photosensitive ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	58
Density	ISO 1183 Method A	g/cm³	0,93
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Photosensitive to UV light. Emits white visible light.		

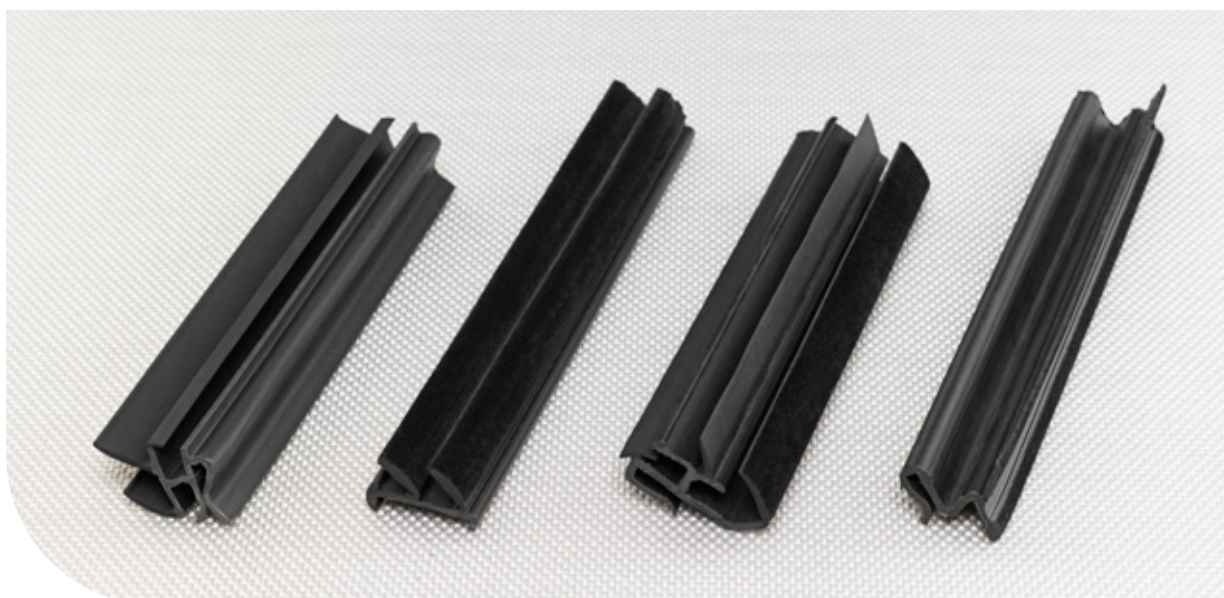


B60A-EE0**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	60
Density	ISO 1183 Method A	g/cm ³	0,99
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction. Compatible with PC and structural Silicone		

N60A-EE1**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,98
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	2,6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		



G60A-EE1**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey RAL 7035 ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,99
Tensile Strength	ISO 37	MPa	5,5
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	2,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		

**G60A-EE2****TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	1,01
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		



G60A-EE3

TPV 

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey RAL7040 
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	1,01
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		



N63A-EE3

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black-photosensitive ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	63
Density	ISO 1183 Method A	g/cm ³	0,93
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	5,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Photosensitive to UV light. Emits white visible light.		

T65A-E03

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			White ○
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	1,04
Tensile Strength	ISO 37	MPa	5,5
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		

N67A-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	67
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	340
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60

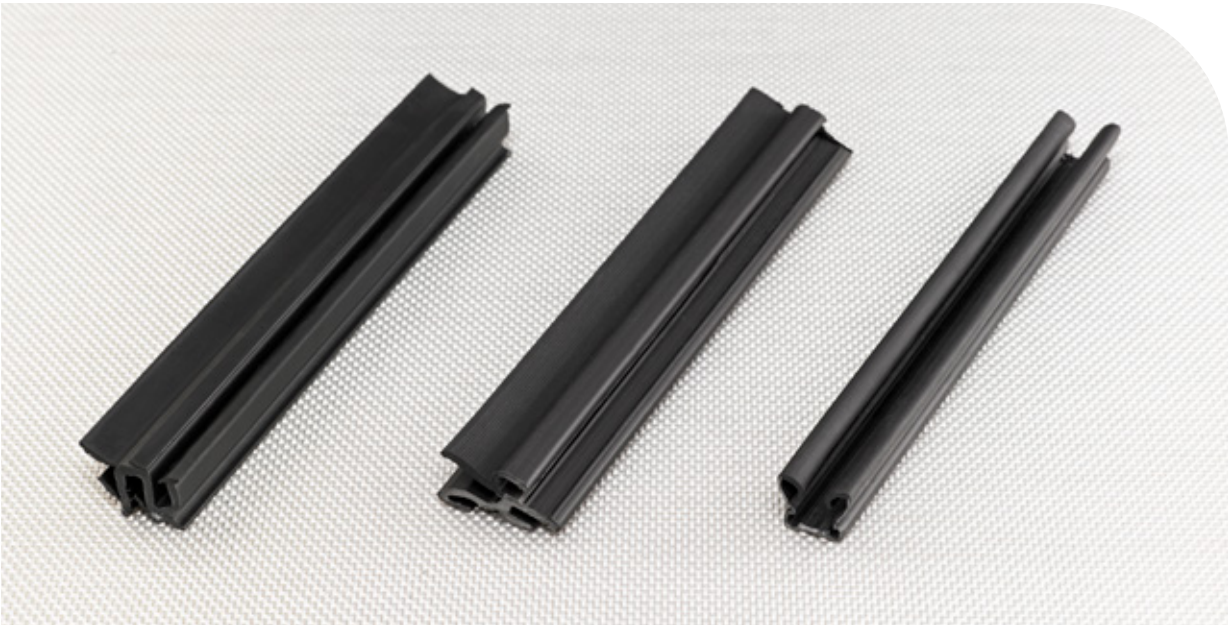


N67A-EE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	67
Density	ISO 1183 Method A	g/cm³	0,95
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	340
Modulus 100%	ISO 37	MPa	2,9
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60





N67A-EE3

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black-photosensitive ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	67
Density	ISO 1183 Method A	g/cm³	0,95
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	340
Modulus 100%	ISO 37	MPa	2,9
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Photosensitive to UV light. Emits white visible light.		





C67A-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	68
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	6,5
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	2,9
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-58

N70A-EE1

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	70
Density	ISO 1183 Method A	g/cm ³	0,98
Tensile Strength	ISO 37	MPa	6,5
Elongation at Break	ISO 37	%	360
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	5,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-50

Special Characteristics / Applications

Profiles and gaskets for doors and windows for construction.

B70A-EE1

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	70
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6,5
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	3,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	11
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-50
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction. Compatible with PC and structural Silicone		

G70A-EE1

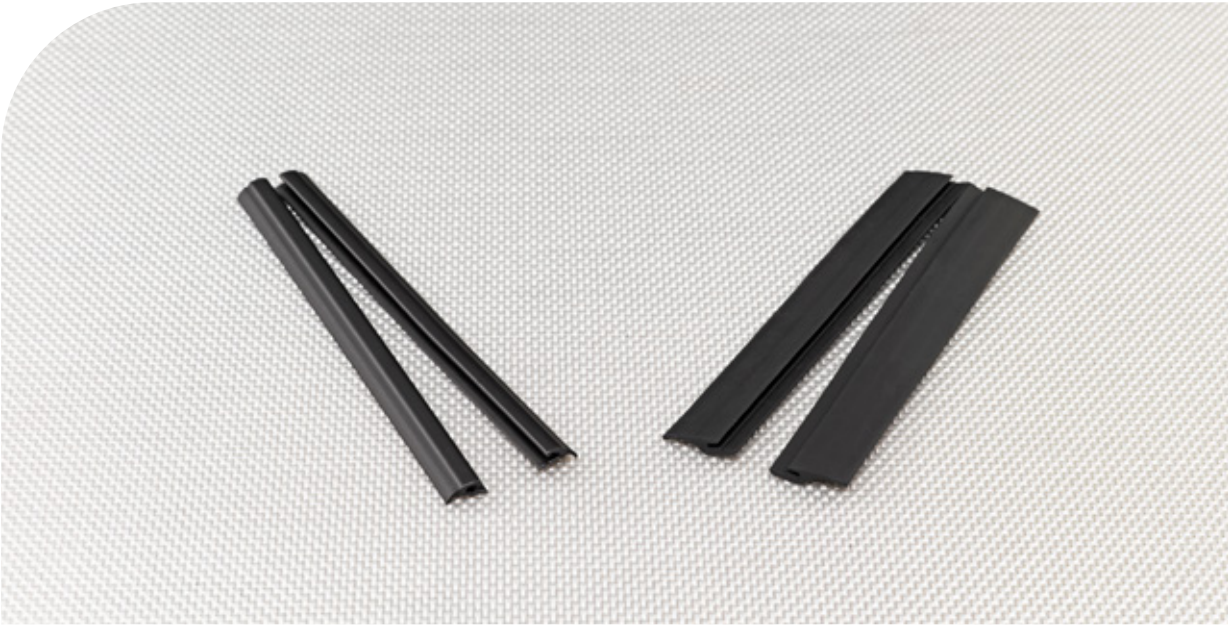
TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey RAL 7035 ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	70
Density	ISO 1183 Method A	g/cm ³	1
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	2,8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	36
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Special Characteristics / Applications	Profiles and gaskets for doors and windows for construction.		

N73A-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	7
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58



N73A-E01

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	7
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58



N73A-EE0**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	7,2
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-58

**N73A-EE3****TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black-photosensitive ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,93
Tensile Strength	ISO 37	MPa	8
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	3,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-58
Special Characteristics / Applications	Photosensitive to UV light. Emits white visible light.		

C73A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	8
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	3,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	10
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58

N75A-E05**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	7
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Special Characteristics / Applications	Economical version		

N80A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	370
Modulus 100%	ISO 37	MPa	4,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	12
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	42
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-55



N80A-EE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	4,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	12
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-55

C80A-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	4,4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	16
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-50

N87A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	12
Elongation at Break	ISO 37	%	420
Modulus 100%	ISO 37	MPa	5,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	20
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	48
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-50

**N87A-E03****TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black-photosensitive ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,93
Tensile Strength	ISO 37	MPa	11
Elongation at Break	ISO 37	%	420
Modulus 100%	ISO 37	MPa	5,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	22
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-50

Special Characteristics / Applications

Fotosensible a la luz UV. Emite luz visible de ColorWhite.

N87A-EE0**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	5,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	22
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	49
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-50

C87A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	10,5
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	5,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	19
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-47

C90A-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	480
Modulus 100%	ISO 37	MPa	5,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	24
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-47
Coefficient of Friction	ISO 8295		90

N90A-EE1

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	1
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	20
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-47

Profiles and gaskets for doors and windows for construction.

G90A-EE2

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey RAL 7035 ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	1
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	19
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	51
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-47

Special Characteristics / Applications

Profiles and gaskets for doors and windows for construction.

G90A-EE3

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Grey RAL7040 ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	1
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	19
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	52
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-47

Special Characteristics / Applications

Profiles and gaskets for doors and windows for construction.

N40D-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	107
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	8,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	38
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	58
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-45

C40D-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	22
Elongation at Break	ISO 37	%	580
Modulus 100%	ISO 37	MPa	9
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	38
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	58
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-45

B40D-EE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	38
Density	ISO 1183 Method A	g/cm ³	1,02
Tensile Strength	ISO 37	MPa	12
Elongation at Break	ISO 37	%	550
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	24
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	65
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-45

Special Characteristics / Applications

Profiles and gaskets for doors and windows for construction.
Compatible with PC and structural Silicone.



N50D-E00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	22
Elongation at Break	ISO 37	%	550
Modulus 100%	ISO 37	MPa	11
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	49
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	64
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-45

N50D-EE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,98
Tensile Strength	ISO 37	MPa	22
Elongation at Break	ISO 37	%	600
Modulus 100%	ISO 37	MPa	12
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	49
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	66
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-45

C50D-E00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,97
Tensile Strength	ISO 37	MPa	27
Elongation at Break	ISO 37	%	650
Modulus 100%	ISO 37	MPa	13
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	42
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	70
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-40

N52D-D00**TPV** elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness (extruded)	ISO 7619-1 (5s)	Shore D	52
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	24
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	13
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	73
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-35
Coefficient of Friction	ISO 8295		0,25
Special Characteristics / Applications	Sliding, low coefficient of friction.		





INJECTION MOLDING



PROCESSING

SETTINGS	UNITS	TYPICAL VALUE
Processing temperature range	°C	160 + 200
Nozzle temperature range	°C	200 + 220

WE RECOMMEND THAT IT BE DRIED FIRST SO AS TO PREVENT SUPERFICIAL DEFECTS IN APPEARANCE DUE TO FLOW LINES OR POOR ADHERENCE IN CO-INJECTION:

Pre-drying time (recommended)	Hours	2 + 4
Pre-drying temperature	°C	80

In order to ensure correct processing, we recommend a screw of $>20D$ in length, with a compression ratio of between 1:2 and 1:3, suitable for polypropylene.

The viscosity of the TPVs can be reduced by increasing the screw speed and/or the injection pressure and to a lesser extent by increasing the temperature.

We recommend maintaining the mold temperature between 20 and 50 °C.

It is important to bear in mind that the contractions of the material are asymmetric. They contract more in longwise direction and to a greater extent in the softer grades.

The product can be reused by mixing ground up material (up to 20% of total) with original material.

INJECTION MOLDING

AUTOMOTIVE

The excellent properties of this material make it ideal for satisfying the demanding requirements of the automotive manufacturing sector, with applications for both the interior and exterior of vehicles, for which there are grades with improved resistance to UV light.

Its most important application is in pieces injected or co-injected with TPV or PP with mineral loads, glass fibre, TPV ELASTOPRENE materials are registered in the IMDS web database to be included in automobile components. They comply with the End-of-life Vehicles Directive (2000/53/EC).

The main car manufacturers have created specific standards for TPV (EPDM+PP) materials, such as:

VW - 50123 & TL 52622

FORD - WSD-M2D378-A1 & WSS-M2D378-B1

PSA - B62 0300 & B64 0100

RENAULT - 00-10-420 & 03-10-104

GM - QK 0035xx

DAIMLER - DBL 5562.30



CONSTRUCTION

In the construction sector, it is used in the manufacture of sealing and gaskets protectors for doors and windows by the injection of corners in TPV profiles.

As well as its normal black, some grades are also available in natural color.

O-rings for water pipes are manufactured by injection or co-injection with PP / SEBS.



OTHERS

TPV Elastoprene can be used in a wide variety of sectors for a multitude of applications such as:

- **Consumer goods:** tool handles, wheels, toy seals, ...
- **Electrical:** insulation of low voltage cables, protection of cables, insulation in batteries, ...
- **White goods:** door seals, drain pipes in washing-machines, guards and trim, ...
- **Industrial parts:** seals in solar panels, container seals, ...



B45A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	45
Density	ISO 1183 Method A	g/cm ³	0,94
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	600
Modulus 100%	ISO 37	MPa	1,4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	3,8
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

N50A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	52
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	3,9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	3,1
Mold shrinkage (Transversally)	ISO 294-4	%	1,3

N50A-i04

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	52
Density	ISO 1183 Method A	g/cm ³	0,99
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	3,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	3
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

Special Characteristics / Applications:

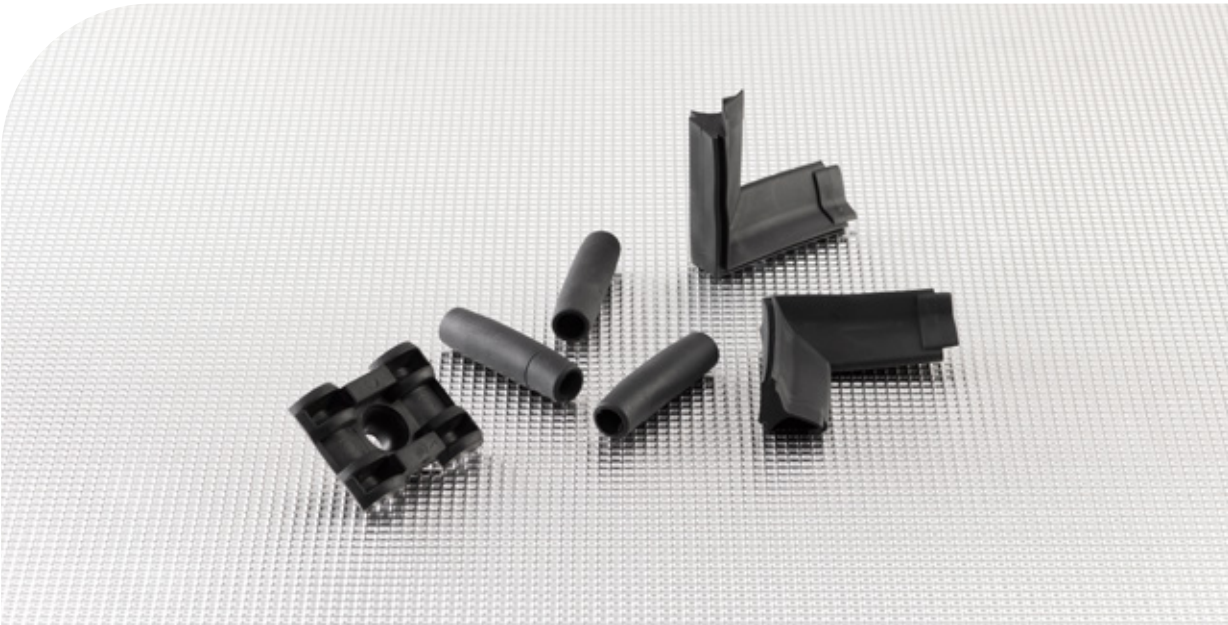
Economical price

N55A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	55
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	3,7
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	4,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,9
Mold shrinkage (Transversally)	ISO 294-4	%	1,2





N55A-i04

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	55
Density	ISO 1183 Method A	g/cm³	0,99
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	1,6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	3,2
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,8
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

Special Characteristics / Applications: Economical price

N55A-IE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	55
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	3,7
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	4,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,9
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

C55A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness	ISO 7619-1 (5s)	Shore A	55
Density	ISO 1183 Method A	g/cm ³	0,94
Tensile Strength	ISO 37	MPa	3,5
Elongation at Break	ISO 37	%	310
Modulus 100%	ISO 37	MPa	1,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	3,8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	30
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	3,1
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N60A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	60
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	1,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	33
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,5
Mold shrinkage (Transversally)	ISO 294-4	%	1



N60A-IE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	60
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	4
Elongation at Break	ISO 37	%	320
Modulus 100%	ISO 37	MPa	1,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	33
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,4
Mold shrinkage (Transversally)	ISO 294-4	%	1

C60A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness	ISO 7619-1 (5s)	Shore A	60
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	4,5
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	4,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	34
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	3,3
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N64A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	64
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	330
Modulus 100%	ISO 37	MPa	2,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,5
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N65A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	330
Modulus 100%	ISO 37	MPa	2,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,6
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N65A-İE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	330
Modulus 100%	ISO 37	MPa	2,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,2
Mold shrinkage (Transversally)	ISO 294-4	%	1



N65A-I05

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5
Elongation at Break	ISO 37	%	330
Modulus 100%	ISO 37	MPa	2,3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	6,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,2
Mold shrinkage (Transversally)	ISO 294-4	%	1

Special Characteristics / Applications:

Economical price

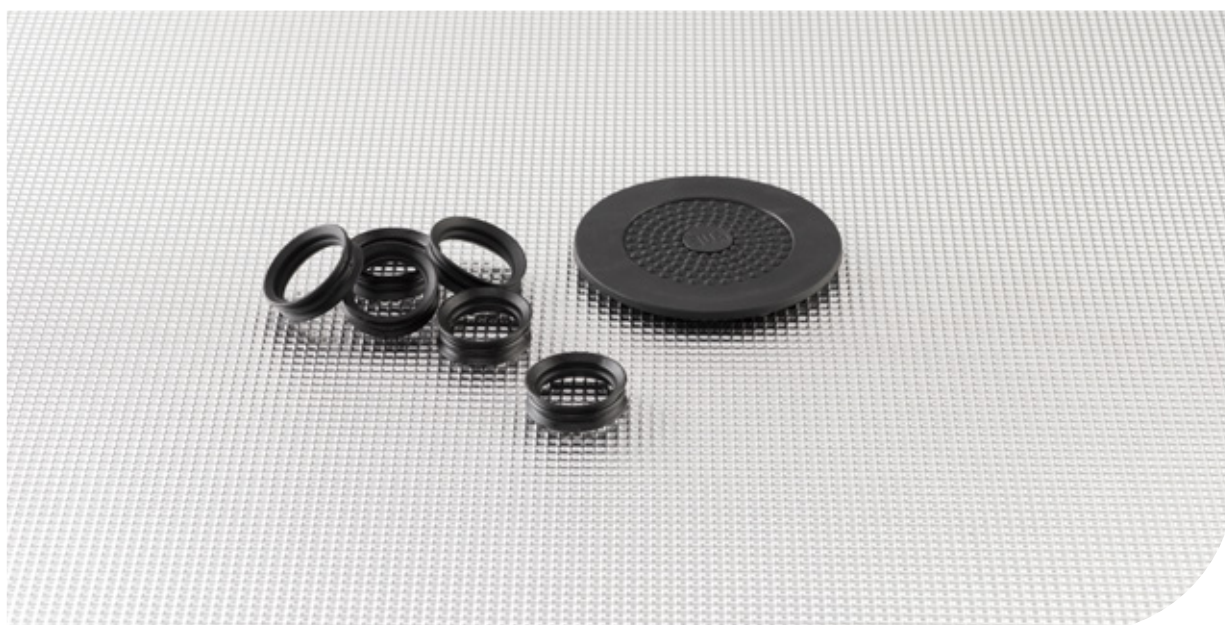
N65A-ME1

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,93
Tensile Strength	ISO 37	MPa	4,2
Elongation at Break	ISO 37	%	430
Modulus 100%	ISO 37	MPa	2,1
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8,2
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-55
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,2
Mold shrinkage (Transversally)	ISO 294-4	%	1,3

Special Characteristics / Applications:

High flow melt index



C65A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness	ISO 7619-1 (5s)	Shore A	65
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	5,2
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	2,2
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	3,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	34
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,4
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N73A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	340
Modulus 100%	ISO 37	MPa	2,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7,8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,3
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N73A-iE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	340
Modulus 100%	ISO 37	MPa	2,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	7,8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	38
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,3
Mold shrinkage (Transversally)	ISO 294-4	%	1,1



C73A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	5,8
Elongation at Break	ISO 37	%	380
Modulus 100%	ISO 37	MPa	2,7
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	5,2
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	35
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-60
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,4
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

N75A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	75
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,3
Mold shrinkage (Transversally)	ISO 294-4	%	1,1



N75A-i05

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	75
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5,2
Elongation at Break	ISO 37	%	380
Modulus 100%	ISO 37	MPa	2,8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,3
Mold shrinkage (Transversally)	ISO 294-4	%	1,1
Special Characteristics / Applications:	Economical price		

N80A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6,6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3,6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	13
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,2
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

C80A-i00

TPV **elastoprene®**

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm³	0,95
Tensile Strength	ISO 37	MPa	6,5
Elongation at Break	ISO 37	%	380
Modulus 100%	ISO 37	MPa	3,1
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	9,5
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	42
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2
Mold shrinkage (Transversally)	ISO 294-4	%	1,1



N80A-IEO

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6,6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	3,6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	13
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	40
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,1
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

N80A-i05

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	5,8
Elongation at Break	ISO 37	%	380
Modulus 100%	ISO 37	MPa	3
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	13
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,1
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

Special Characteristics / Applications:

Economical price



N80A-MEO

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,94
Tensile Strength	ISO 37	MPa	6
Elongation at Break	ISO 37	%	350
Modulus 100%	ISO 37	MPa	4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	8
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-50
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,2
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

Special Characteristics / Applications:

High flow melt index

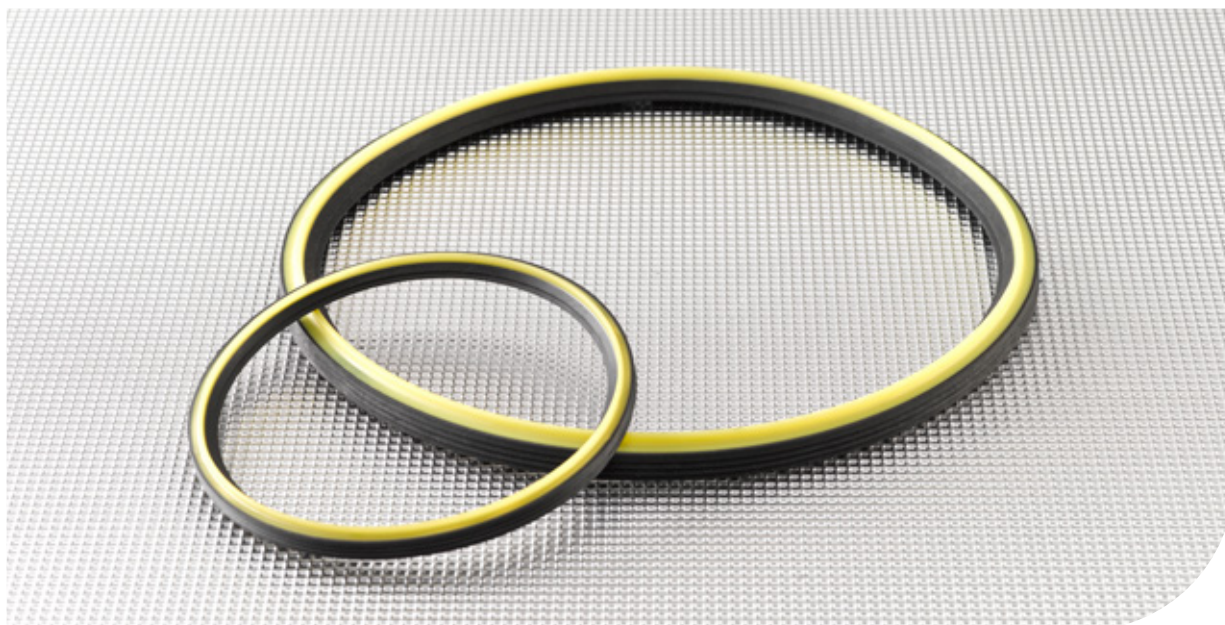
B80A-i03

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	6,6
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	3,6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	10
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	52
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-58
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,2
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

Special Characteristics / Applications:

EPDM rubber hoses overmolding



N85A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	85
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	12
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-55
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,7
Mold shrinkage (Transversally)	ISO 294-4	%	1,1

C85A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural 
Hardness	ISO 7619-1 (5s)	Shore A	85
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	7,8
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	4,4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	17
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	48
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-55
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,2
Mold shrinkage (Transversally)	ISO 294-4	%	1,3

N87A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black 
Hardness	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	4,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	18
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-55
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,8
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

N87A-IE0

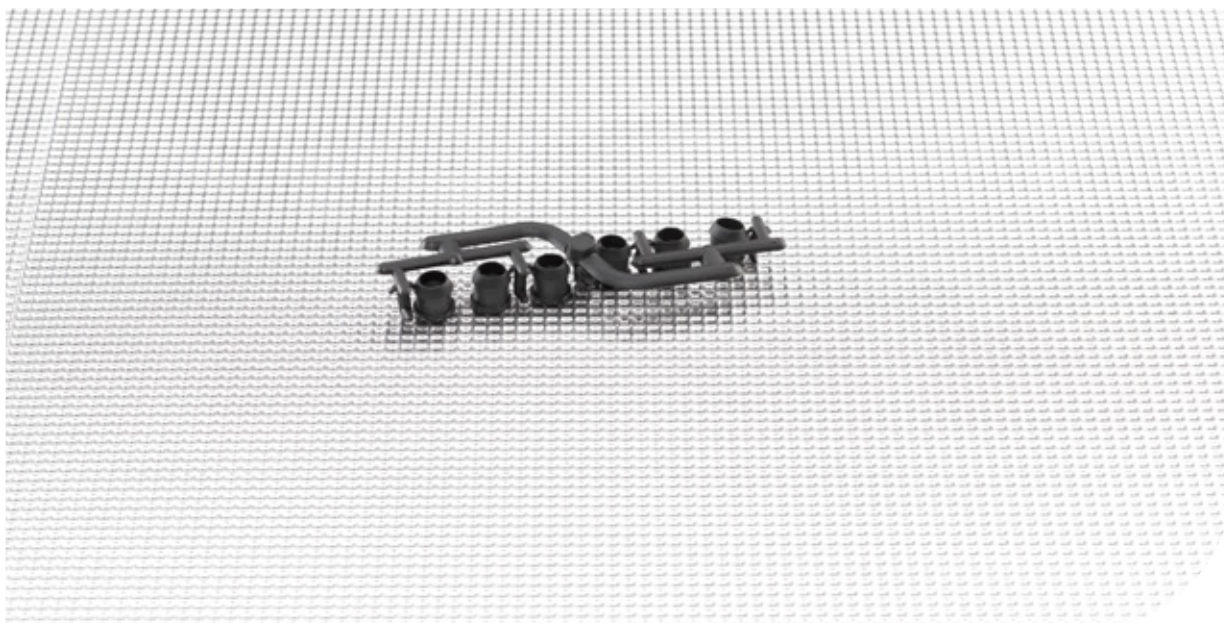
TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	4,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	18
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	45
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-55
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	2,1
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

N90A-I00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	5,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	22
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-50
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,9
Mold shrinkage (Transversally)	ISO 294-4	%	1,3



N90A-IE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	10
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	5,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	22
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-50
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,9
Mold shrinkage (Transversally)	ISO 294-4	%	1,3

C90A-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness	ISO 7619-1 (5s)	Shore A	90
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	7,8
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	5,1
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	21
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-50
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,4
Mold shrinkage (Transversally)	ISO 294-4	%	1,2

N40D-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	17
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	59
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-47
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,5
Mold shrinkage (Transversally)	ISO 294-4	%	1,1



N40D-IE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	17
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	59
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-47
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,5
Mold shrinkage (Transversally)	ISO 294-4	%	1,1





N40D-Z00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm ³	0,95
Tensile Strength	ISO 37	MPa	12
Elongation at Break	ISO 37	%	490
Modulus 100%	ISO 37	MPa	9
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	26
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	70
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-45
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,4
Mold shrinkage (Transversally)	ISO 294-4	%	1,4

Special Characteristics / Applications:

Spoiler lip for bumpers

N50D-i00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	20
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	11
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	45
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	65
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-45
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,6
Mold shrinkage (Transversally)	ISO 294-4	%	1,3



N50D-IE0

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	20
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	11
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	65
UV Light Stabilization			Enhanced
Brittleness temperature	ISO 812	°C	-45
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,6
Mold shrinkage (Transversally)	ISO 294-4	%	1,3

C50A-D00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Natural ●
Hardness	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,97
Tensile Strength	ISO 37	MPa	25
Elongation at Break	ISO 37	%	600
Modulus 100%	ISO 37	MPa	10
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	69
UV Light Stabilization			Standard
Brittleness temperature	ISO 812	°C	-45
Mold Shrinkage (Longitudinally to injection flow)	ISO 294-4	%	1,4
Mold shrinkage (Transversally)	ISO 294-4	%	1,3



BLOW MOLDING



PROCESSING

SETTINGS	UNITS	TYPICAL VALUE
Processing temperature range	°C	160 + 200
Temperature range in Head / Die	°C	200 + 220

WE RECOMMEND THAT IT BE DRIED FIRST SO AS TO PREVENT SUPERFICIAL DEFECTS IN APPEARANCE DUE TO PORES AND BLISTERS:

Pre-drying time (recommended)	Hours	2 + 4
Pre-drying temperature	°C	80

In order to ensure correct processing, we recommend a screw of >20D in length, with a compression ratio of between 1:2 and 1:3, suitable for polypropylene.

The high viscosity of TPVs in molten state makes it easier to maintain the geometry of the parison until blowing time. Viscosity can be reduced by increasing screw speed and to a lesser extent by increasing the temperature. We recommend keeping the mold temperature between 10 and 30 °C.

It can be reused by mixing ground up material (up to 20% of total) with original material.

BLOW MOLDING

AUTOMOTIVE

The excellent properties of this material make it ideal for satisfying the demanding requirements of the automotive manufacturing sector, with applications for both the interior and for under the bonnet.

Its main application is in bellows for shock absorbers and steering, and dust covers.

TPV ELASTOPRENE materials are registered in the IMDS web database to be included in automobile components.

They comply with the End-of-life Vehicles Directive (2000/53/EC).

The main car manufacturers have created specific standards for TPV (EPDM+PP) materials, such as:

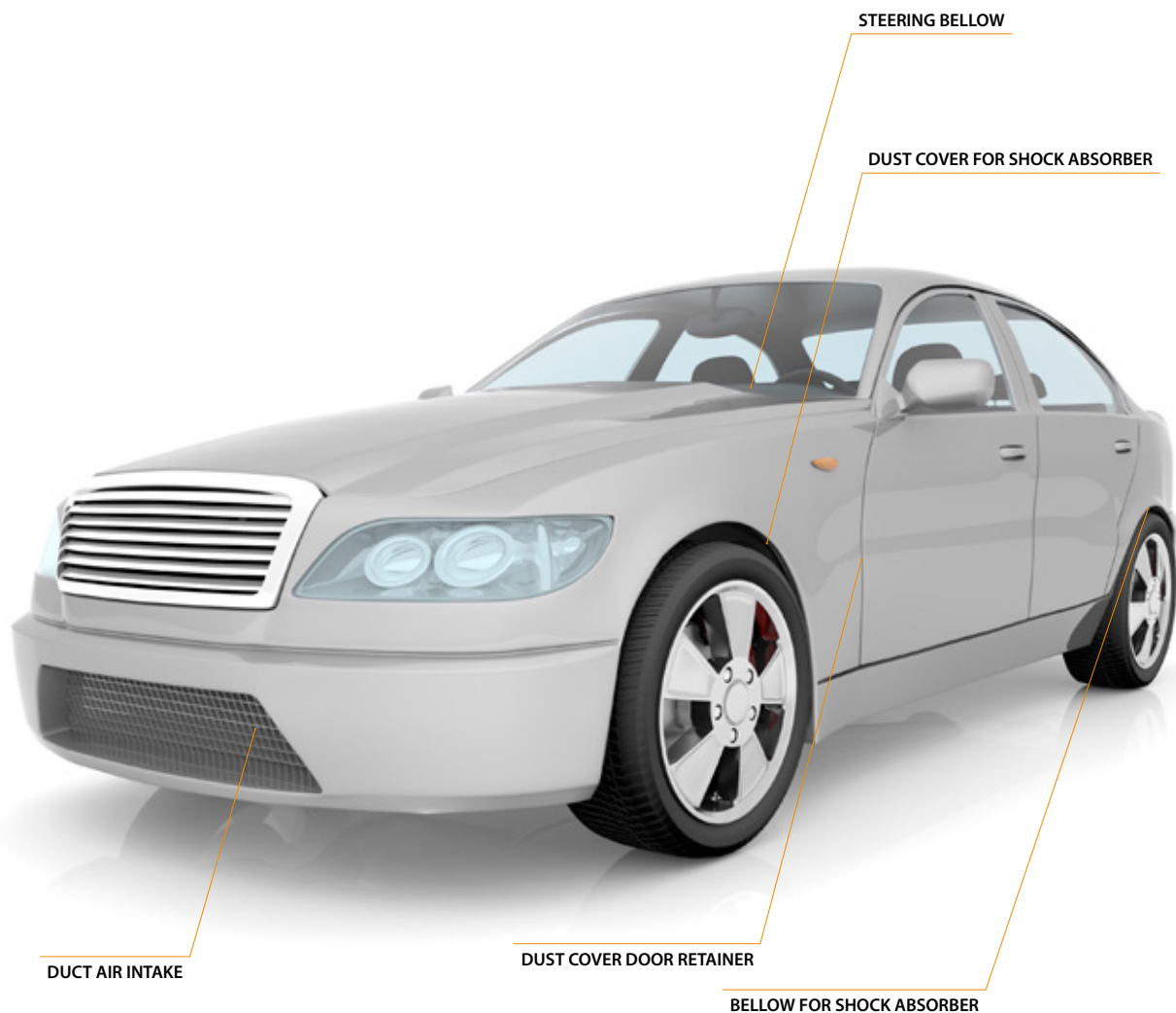
VW - 50123

FORD - WSD-M2D378-A1 & WSD-M2D441-A

PSA - B62 0300 & B64 0100

RENAULT - 00-10-420 & 03-10-104

GM - QK 0035x



N73A-S00

TPV **elastoprene**

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	73
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	6,5
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	3,4
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	16
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	43
Brittleness temperature	ISO 812	°C	-58



N80A-S00

TPV elastoprene®

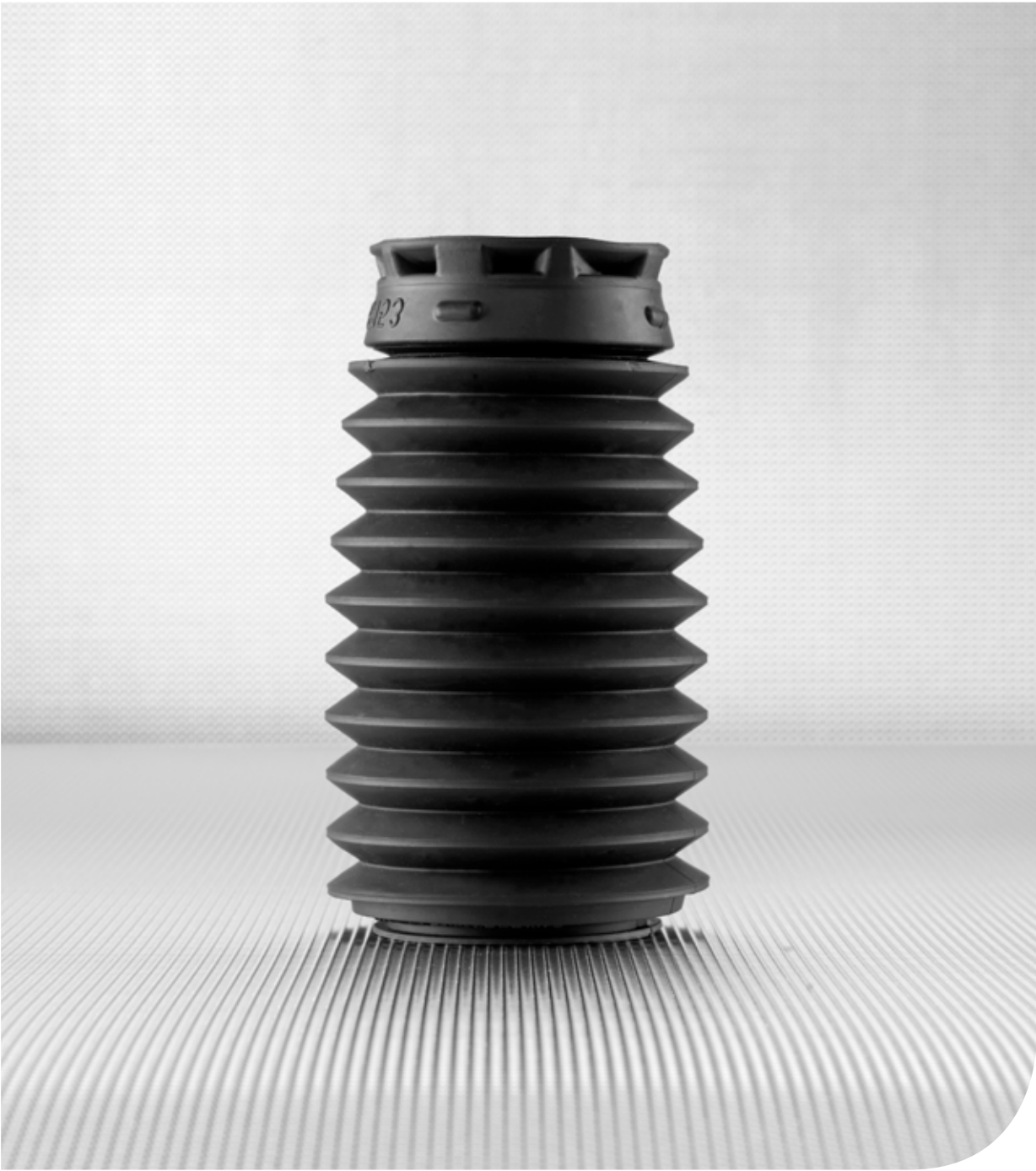
FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	80
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	9
Elongation at Break	ISO 37	%	370
Modulus 100%	ISO 37	MPa	4,5
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	12
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	46
Brittleness temperature	ISO 812	°C	-55



N87A-S00

TPV elastoprene®

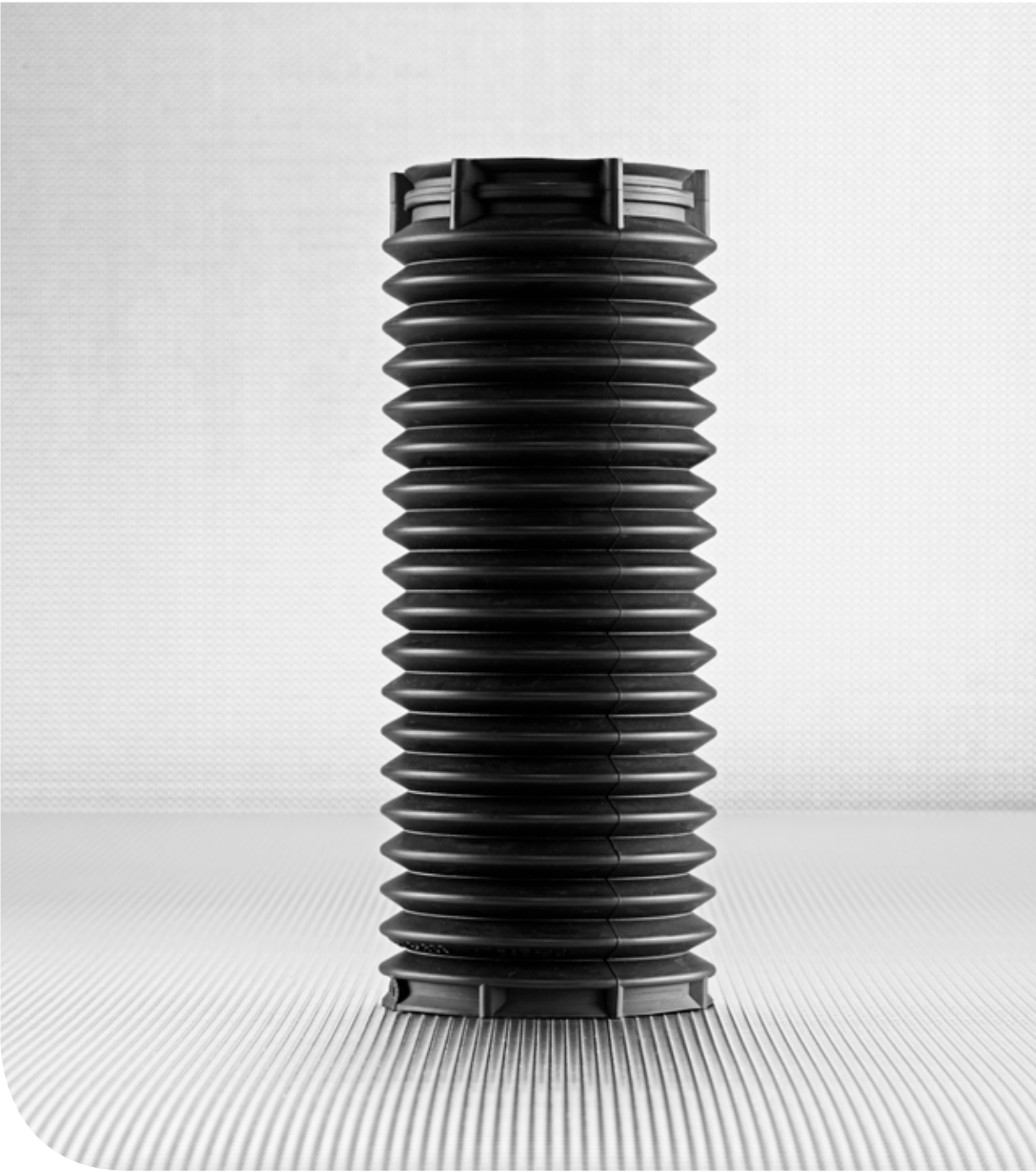
FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore A	87
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	12
Elongation at Break	ISO 37	%	400
Modulus 100%	ISO 37	MPa	6
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	25
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	50
Brittleness temperature	ISO 812	°C	-50



N40D-S00

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm³	0,96
Tensile Strength	ISO 37	MPa	17
Elongation at Break	ISO 37	%	450
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	59
Brittleness temperature	ISO 812	°C	-47





N40D-S02

TPV **elastoprene®**

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	40
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	14
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	40
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	62
Brittleness temperature	ISO 812	°C	-45
Special Characteristics / Applications:	Economical version, shock absorber bellows		



N40D-S03

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	75
Density	ISO 1183 Method A	g/cm ³	1,01
Tensile Strength	ISO 37	MPa	14
Elongation at Break	ISO 37	%	500
Modulus 100%	ISO 37	MPa	8
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	30
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	68
Brittleness temperature	ISO 812	°C	-45
Special Characteristics / Applications:	Economical version, covers		

N50D-S02

TPV elastoprene®

FUNCTIONAL CHARACTERISTICS	STANDARD	UNITS	TYPICAL VALUE
Color			Black ●
Hardness	ISO 7619-1 (5s)	Shore D	50
Density	ISO 1183 Method A	g/cm ³	0,96
Tensile Strength	ISO 37	MPa	25
Elongation at Break	ISO 37	%	650
Modulus 100%	ISO 37	MPa	11
Tear Strength. Trouser @23°C	ISO 34-1 A	N/mm	45
Compression Set 22h@70°C	ISO 815 Type A (Init. Def. 25%)	%	66
Brittleness temperature	ISO 812	°C	-45
Special Characteristics / Applications:	Economical version, shock absorber bellows		



PACKAGING

TPV elastoprene®

The TPV comes in small rounded pellets which makes it easier to feed by pneumatic transport or by gravity dosing from hoppers, as well as manually straight from the packaging.

The following packaging can be supplied according to customer needs:

PLASTIC BAGS

Heat-sealed PE sacks with a net capacity of 25 kg.
The standard units of transport are CP9 (114x114 cm)
or CP7 (130x110 cm) type pallets, with a capacity of
1,000 to 1,250kg.



OCTABINS

Cardboard octabins with an inner polyethylene (PE) sack, with a net capacity of 500 to 550 kg.
The unit of transport are CP9 type pallets, which
can be piled up to transport a total of 1,000kg
or 1,100kg.



BIG BAGS

Raffia sacks with or without an inner PE sack with a net capacity of approximately 1,000 kg.
The unit of transport is CP9 type pallets.



We could also study the possibility of sending it in any other type of packaging requested by the customer.

TAILOR MADE GRADES

At Elastómeros Riojanos we specialize in the development and manufacture of new formulations. We can develop TPV compounds on demand from the customer or create new variants for specific projects and/or particular requirements of an application.

If you need a special grade or technical assistance about any of the normal grades, please do not hesitate to contact our sales representative in your area, or call us directly at the factory on +34 941 380 200. We would also be happy to receive your queries by email to elastoprene@elastorsa.com



CHARACTERISTICS	UNID. / TYPE	VALUE/ REQUIREMENT
1 Density	g/cm ³	
2 Annual consumption	Kg/year	
	Automotive	
	Construction	
3 Sector: (Applicable Standard)	Industrial	
	Electric	
	Other...	
4 Application Description:		
5 Material currently in use		
	Extrusion	
	Co-extrusion	
	Injection	
	Co-Injection	
6 Process (Substrate)*	Over-Molding	
	Blow Molding*	
	Calendering*	
	Other...	
7 Mechanical and elastic properties		
Hardness	Shore-A	
Hardness	Shore-D	
Tensile Strength	N/mm ²	
Elongation at Break	%	
Tear Strength	N/mm	
Compression Set	%	
Other...		
	Black	●
	Natural	●
8 Color:	White	○
	Grey	●
	Other...	
9 Hot Air Aging:	Hours & °C	
10 Service Temperature:	Maximum °C	
	Minimum °C	
11 Resistance to Light:	Inner	
	Outer UV light	
	None	
	Oil	
	Grease	
12 Chemical Resistance: Type and Duration (h)	Acid	
	Base	
	Water	
	Other...	
13 Certificate:	Drinking water	
	Food contact	
	Medical	
	Other...	
14 Other requirements to be considered:		

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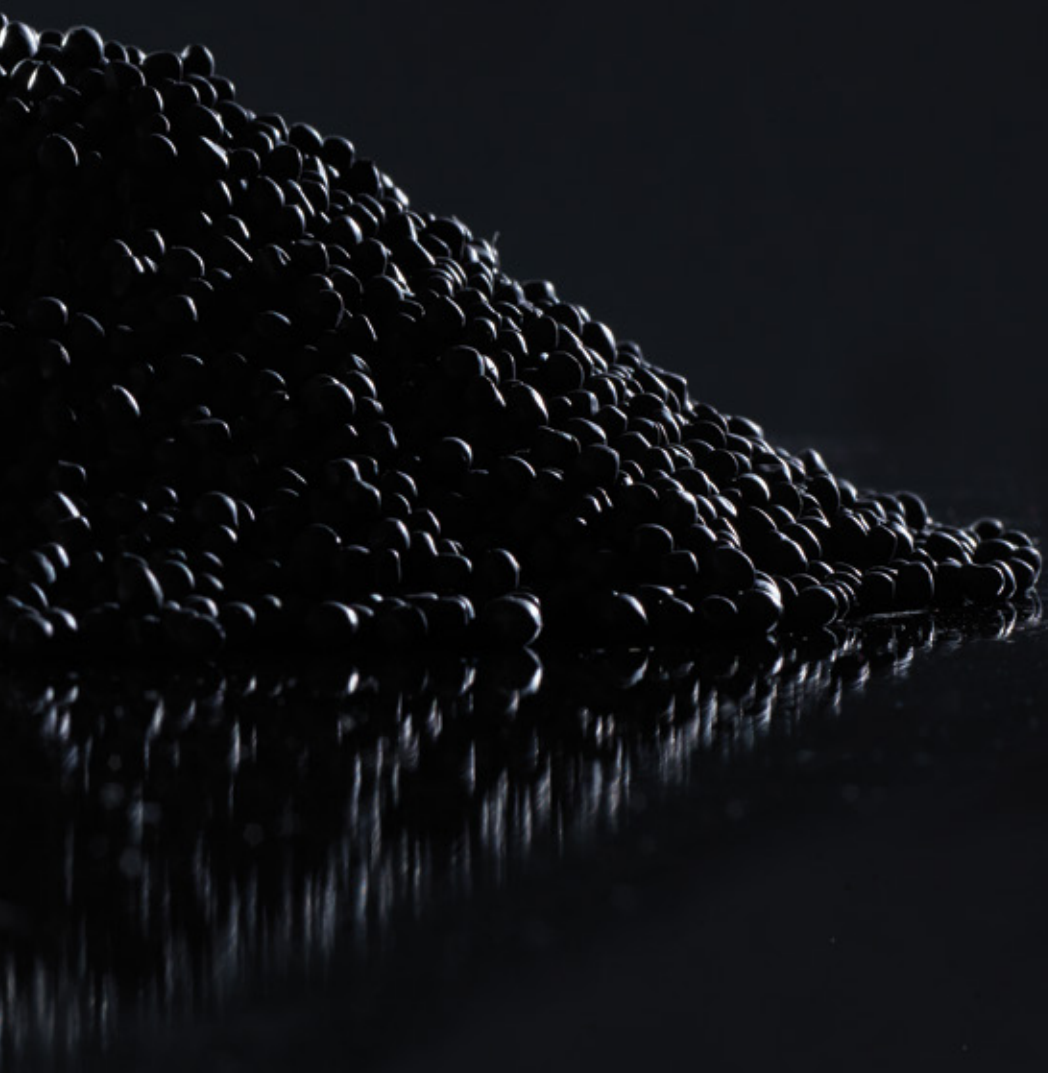
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