



# FlexiShine<sup>™</sup>

*QMS Certified Group*

# Flexiprene

Thermoplastic Elastomer



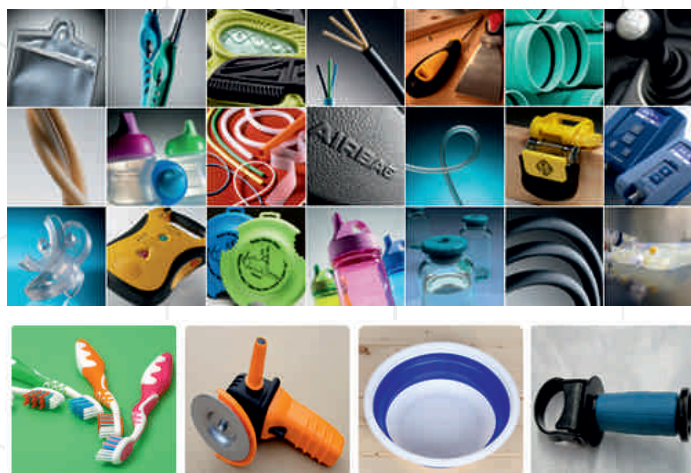
**TPR • TPS • TPV • TPO**







## WELCOME TO FLEXISHINE POLYBLENDS

*INTRODUCING THERMOPLASTIC  
ELASTOMERS TPE TO EXCEED  
TODAY'S HIGHEST PERFORMANCE  
REQUIREMENT AND READY  
FOR OUR CUSTOMERS  
FUTURE NEEDS*

***Our TPE family includes  
TPV, TPO, TPS, TPR***

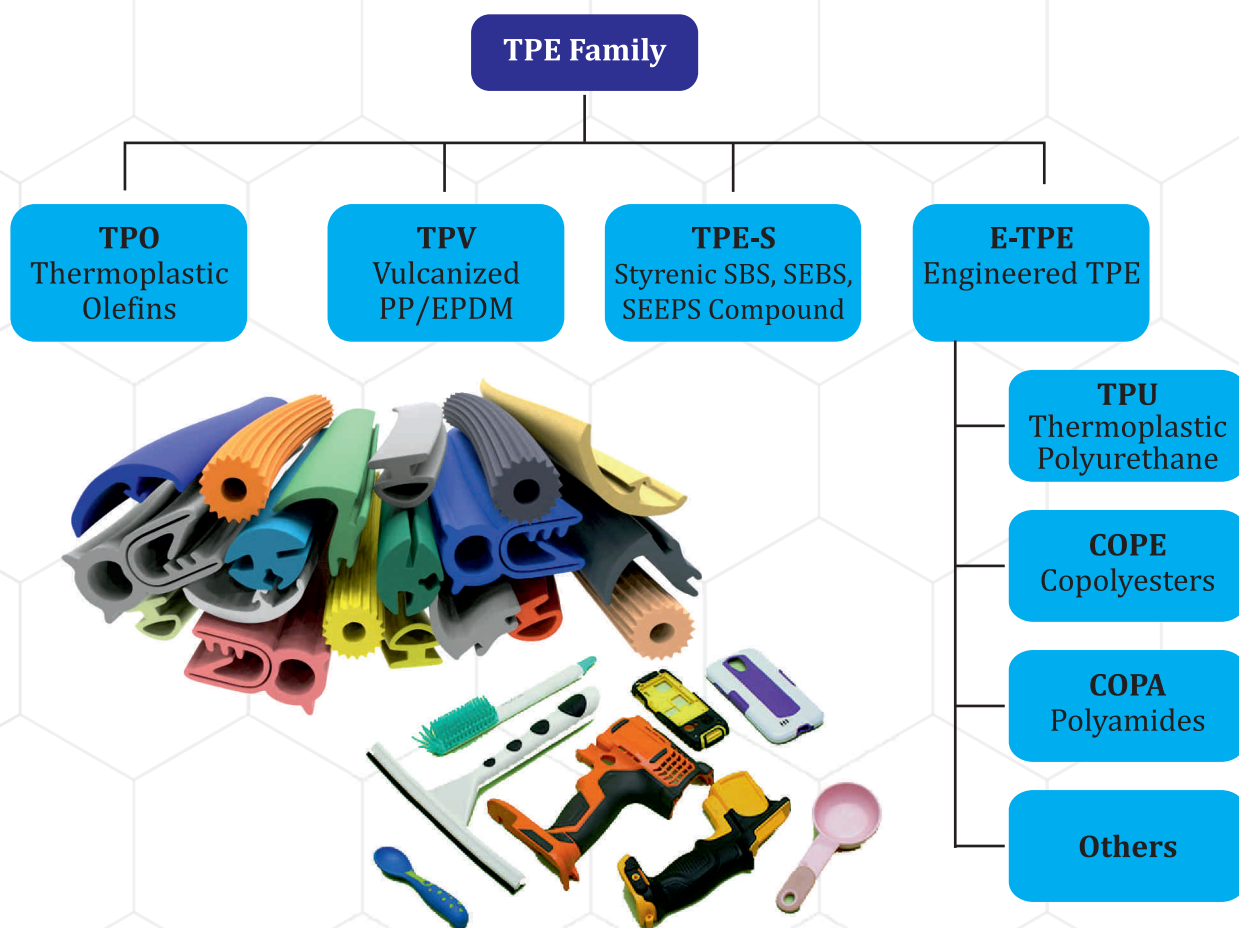


### LEGEND

-  Head Office
-  Plants
-  Offices
-  Storage Facility (petrochemicals)

	Flexiprene SEBS/SBS/SEEPS	Flexiprene V	Flexipro
<b>Hardness</b> Set (ISO 868) (Shore A-D)	30 A - 50 D	40 A - 55 D	50 A - 60 D
<b>Density</b> (g/cm <sup>3</sup> )	0.88 - 1.4	0.93 - 1.1	0.88 - 1.12
<b>Compression</b> Set	Good	Excellent	Very Good
<b>Tensile</b> Set (ISO 527)	1.5 MPa - 12 MPa	3 MPa - 10 MPa	10 kg/cm <sup>3</sup> - 30 kg/cm <sup>3</sup>
<b>Tear</b> Set (ISO 34)	20 kg/cm <sup>3</sup> - 60 kg/cm <sup>3</sup>	20 kg/cm <sup>3</sup> - 120 kg/cm <sup>3</sup>	30 kg/cm <sup>3</sup> - 50 kg/cm <sup>3</sup>
<b>Elongation</b> Set (ISO 527) (%)	300 - 1200	500 - 1000	400 - 1000
<b>Working</b> Temp. Max. (°C)	130	140	100
<b>Working</b> Temp. Min.(°C)	-30	-40	-40
<b>Adhesion</b>	PP/ABS/HIPS/SAN/PC/NYLON	PP/ABS/HIPS/SAN/PC/NYLON	PP/ABS/HIPS/SAN/PC/NYLON
<b>Solvent</b> Resistance	Medium	Good	Medium
<b>Motor Oil</b> Resistance	Good	Excellent	Medium
<b>Acid-Base</b> Resistance	Excellent	Excellent	Excellent
<b>UV-Ozone</b> Stability	Medium	Excellent	Excellent

Note : For all above properties, please refer to customized / specific grades product data sheet before evaluating.





*TPE materials have performance properties like that of thermoset rubbers but with the process and design flexibility like plastics, thereby providing wide design options and enhanced cost reduction opportunities*



## **Automotive Segment**

- Adhesion to PP, HDPE, ABS, HIPS, NYLON & PC
- Easy colouring (compounds in natural & Transparent colours)
- Excellent mechanical properties
- Excellent processing behaviour
- Pleasant surface feel (Soft touch)
- High UV & Ozone resistance
- Superior surface finish
- High flow.
- Excellent resilience
- Good compression set
- Smooth injection mouldable & extrudable
- Designed to meet the Auto interior & exterior norms
- Designed to meet REACH & RoHS requirement





## Consumer /Electronics / Footwear / Sports & Kitchen Utensils SEGMENT

### • **Soft Grips / Toothbrushes**

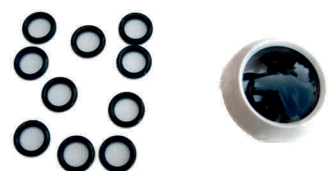
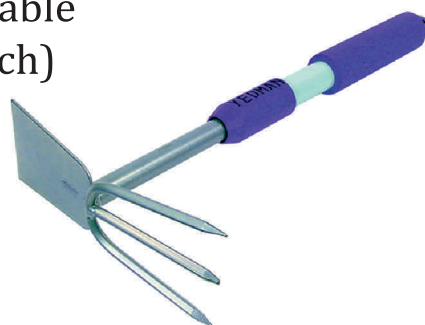
- Adhesion to PP, ABS, HIPS, SAN, PC & NYLON
- Easy colouring (compounds in natural & transparent colors)
- Easy flowing
- Excellent mechanical properties
- Excellent Chemical Resistivity
- Good weathering resistance
- High flame retardant properties
- High degree of scratch resistance
- Wide ranges of Grades suitable for all kinds ball pen grippers, non Pvc strain free erasrs & DF barrel coating grades .

### • **Designed to meet REACH, RoHS, FDA & EN 71 requirement**

### • **Wide ranges of products for suitable moulding & extrudable granules for Household articles, Packaging, Razors , Kitchen utensils & Garden equipment's .**

### • **Seals / Toothbrushes Soft grip / Toys**

- Applications with food contact
- Easy colouring (compounds in natural colours)
- Excellent mechanical properties
- Excellent processing behaviour
- Halogen-free
- In natural or translucent available
- Pleasant surface feel (Soft touch)
- Recyclable
- Excellent wear resistance
- Highly transparent
- Super soft
- Excellent compression set
- Good abrasion resistance for castor wheel & luggage wheel applications
- Wide range of proven grades suitable for manufacturing of all kinds of washers for irrigation pipes , cpvc pipes & automotive grades



## Medical / Surgical Goods Segment

- Excellent mechanical properties
- For injection moulding
- Free of animal based ingredients
- Sterilizable
- ***Excellent transparent grades***
- ***Wide ranges of flow characteristics materials to meet the critical part mouldings***
  - Low Friction
  - Translucent
  - Excellent resealing properties
  - Excellent elasticity combined with
- ***Latex free & phthalate free compound***
- ***Designed to meet all medical requirement as per IS & FDA standard***
- ***Adhesion to PP,ABS,HIPS, SAN , PC & NYLON***





## Household articles / Packaging / Razors / Seals / Toothbrushes Soft grip / Toys



- Adhesion to PP, HDPE, ABS, HIPS, NYLON & PC
- Applications with food contact
- Easy coloring (compounds in natural colors)
- Excellent mechanical properties
- Excellent processing behavior
- Halogen-free
- In natural or translucent available
- Pleasant surface feel (Soft touch)
- Recyclable
- Excellent wear resistance
- Highly transparent
- Super soft
- Excellent compression set



### Flexiprene

● EXCELLENT    ● GOOD    ● MEDIUM    ○ POOR

TPE Characteristics	Flexiprene R	Flexiprene V	Flexipro
Wide hardness range	●	●	●
Does not require vulcanisation-quire higher saving on the processing costs	●	●	●
Remains flexible at low temperatures	●	●	●
High temperature resistance	●	●	●
Electrical insulator with very low conductivity	●	●	●
Has grades with very low compression set	●	●	●
Grades having excellent abrasion resistance	●	●	●
Excellent tear resistance	●	●	●
100% recyclable	●	●	●
PVC free	●	●	●
Resistance to solvents	●	●	●
Resistance to oil	●	●	●
Resistance to acids bases and detergents	●	●	●
Resistance to UV and ozone	●	●	●
Resistance to bacterial and fungus growth	●	●	●
Has low toxic potential, with many grades conforming with FDA regulations	●	●	●
Halogen free flame retardancy (V0-V1-V2)	●	●	●
Colored grades available	●	●	●
Allows direct colouring during processing by utilizing PP or PE based color	●	●	●
2-shot molding onto wide range of plastics	●	●	●
Suitable for co-extrusion process	●	●	●



**FlexiShine<sup>TM</sup>**

*QMS Certified Group*

**FLEXISHINE POLYBLENDS LLP.**

**Factory**

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Khatraj-Vadsar Road,  
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Satellite, Ahmedabad.  
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