

> INDUSTRY BULLETIN

Barricade[™] Elastomers Crosslinkable Elastomers with Fortrex[™] Technology

Formulated to bridge the gap between traditional TPEs and silicone, this high-performance elastomer expands opportunities for new applications.

Leveraging licensed Fortrex[™] technology, this specialty solution satisfies high temperature compression set performance needs and offers the design flexibility and processing capabilities of thermoplastics. An improved, high-performance elastomer, Barricade solutions are lighter weight and show improved tear strength over general purpose TPV and silicone materials.

With these improved performance qualities, Barricade formulations are fitting choices for tubing, hoses, seals, gaskets and more in consumer, healthcare and industrial applications.

To serve a number of uses, all three grades are translucent, yet easily colorable press side or as a custom pre-colored formulation.





Fortrex[™] is a trademark of Cooper-Standard Automotive, Inc.

COMPARING BARRICADE[™] ELASTOMERS WITH SILICONE AND TPV

CHARACTERISTICS	BARRICADE	SILICONE	TPV	
High Temperature Compression Set	>175°C	>175°C >175°C		
Processability	Excellent	Poor	Excellent	
Design Optimization/ Customization	Excellent	Fair	Good	
Process Simplicity	One Step	Multiple Steps	One Step	
Total Production Costs		\$\$\$\$	\$\$	
Raw Material Costs		\$\$\$\$	\$\$	
Recycling/Scrap	Poor	Poor	Excellent	
Oil Resistance	Poor	Excellent	Poor	
Density	0.86	1.07*	1.00*	

* Typical density of general purpose grades

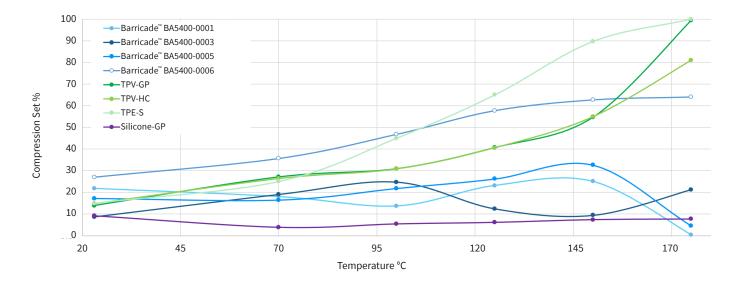
KEY PROPERTIES AND PERFORMANCE

	BA5400- 0001	BA5400- 0002	BA5400- 0003	BA5400- 0005	BA5400- 0006
Color	Translucent	Translucent	Translucent	Translucent	Translucent
Durometer, Shore A	75	81	64	53	91
Tensile Strength (PSI)	880	1140	545	473	1861
Elongation %	110%	108%	120%	104%	243%
Injection Moldable	Yes	Yes	No	Yes	Yes
Extrudable	Yes	Yes	Yes	Yes	Yes
Compression Set (23°C)	22%	14%	12%	17%	27%
Compression Set (125°C)	23%	17%	12%	26%	58%

Customization available (e.g., durometer 50-90A, improved translucency/opacity, color and more)

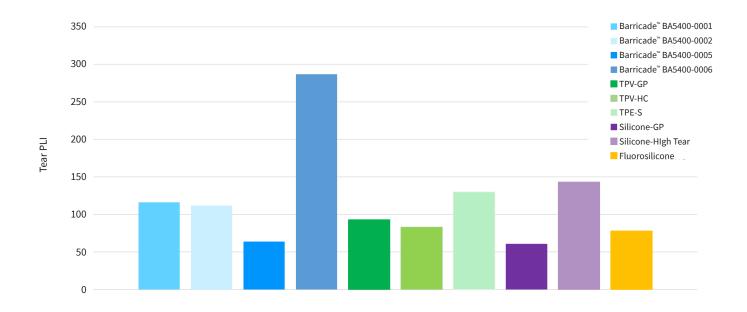
COMPRESSION SET VS. TEMPERATURE

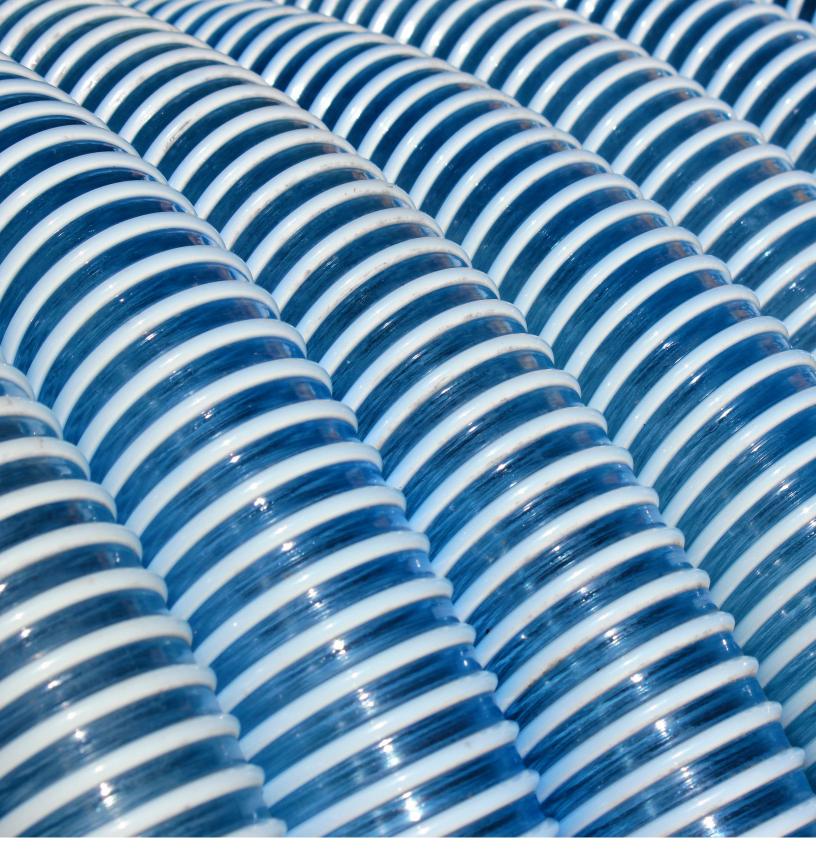
- ASTM D395 B, 22 hr.
- Barricade[™] formulations show improved compression set performance at elevated temperatures compared to TPV and are on par with silicone



TEAR STRENGTH

• Barricade[™] formulations show improved tear strength over general purpose TPV, silicone and fluorosilicone materials





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