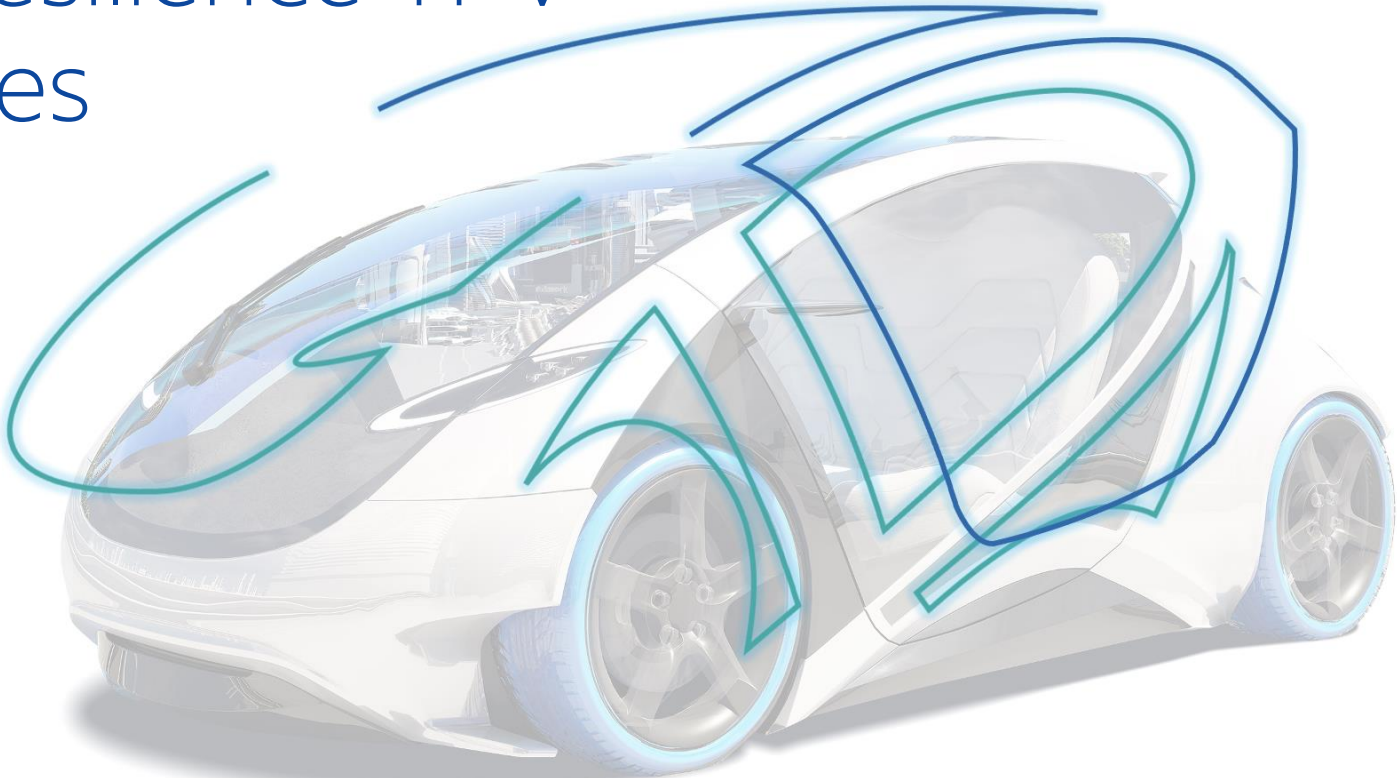


Santoprene™ High Resilience TPV Mechanical properties



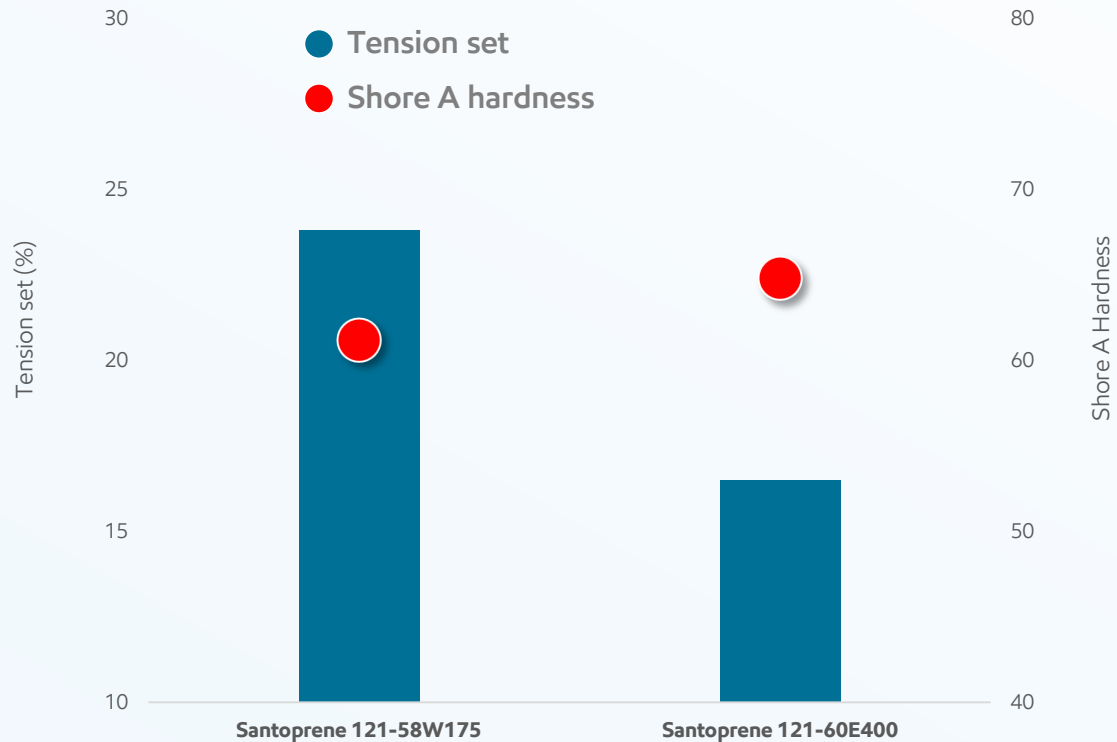


Santoprene™ High Resilience (HR) 121-60E400 TPV

Why it matters

- More demanding sealing requirements in terms of noise and weather conditions
- Increased sealing performance
 - Hardness target: 60 Shore A
 - Lower compression set for enhanced performance
- Good "Class A" surface
- Can be expanded to automotive dynamic seals

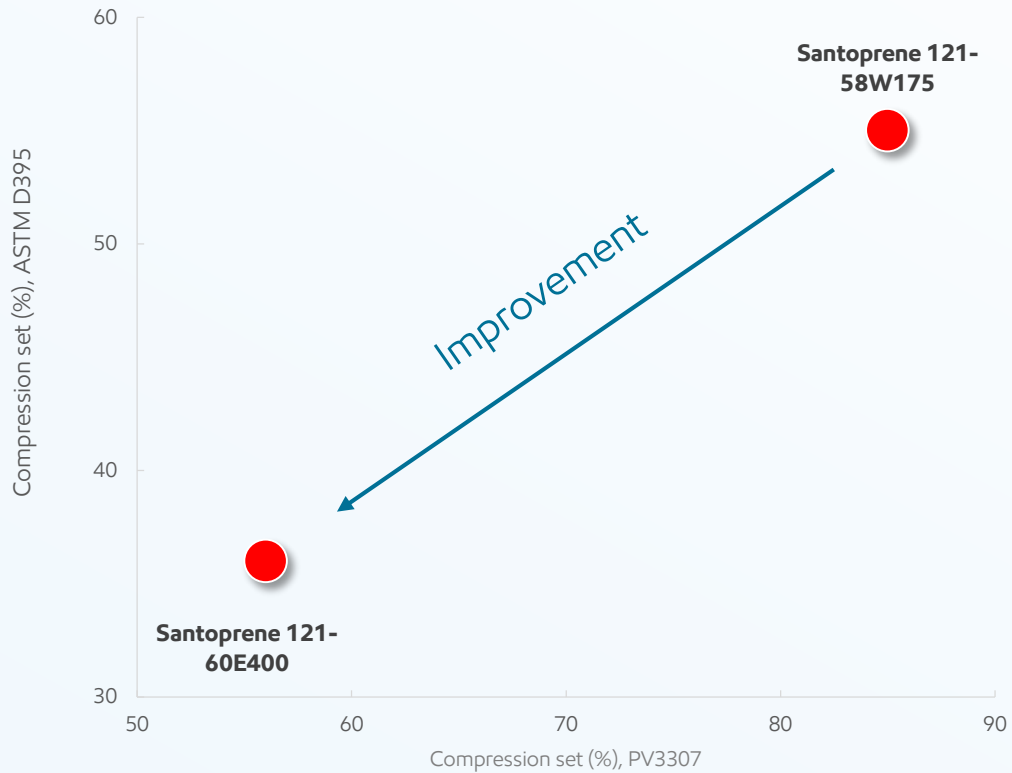
Santoprene™ HR 121-60E400 TPV exhibits **step-out improvement in tension set** at higher overall hardness



Step-out
improvement in
elastic recovery

Testing conducted as per modified TPE-0053 Method, 50% strain, 22h at 70C. Cool under stress for 2h and release for 30min before measurement

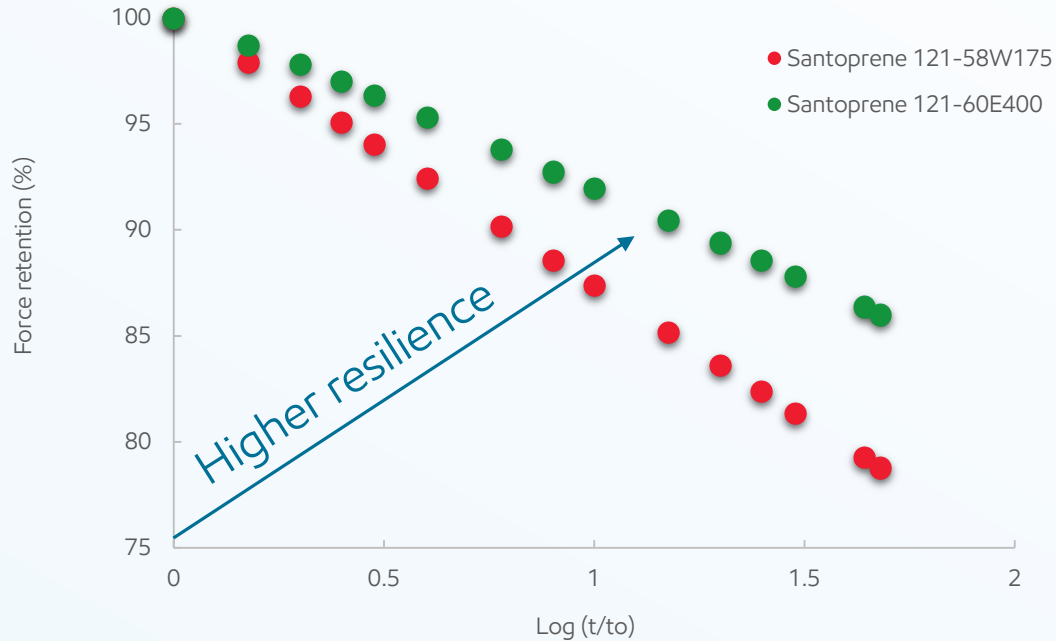
Santoprene™ HR 121-60E400 TPV exhibits
step-out improvement in sealing compression set
under demanding conditions



Step-out
improvement in
elastic recovery

Compression set conducted on injection molded buttons according to, ASTM D395B – 70°C 168h, 25% strain PV3307 - 70°C, 94h, 50% strain, measured 5 seconds after release

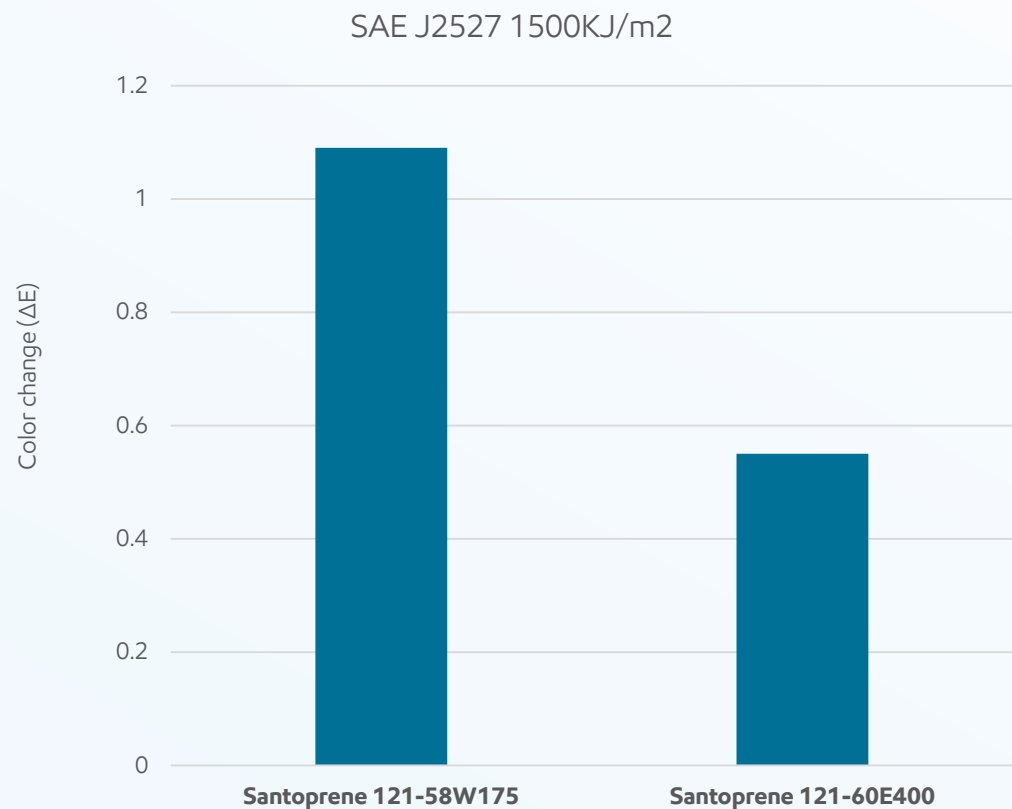
Santoprene™ HR 121-60E400 TPV exhibits **superior stress relaxation / force retention** over commercial TPVs



% force retention	Santoprene 121-58W175	Santoprene 121-60E400	
30 minutes	58.3	72.3	+24%
24 hours	78.8	86	+9.1%

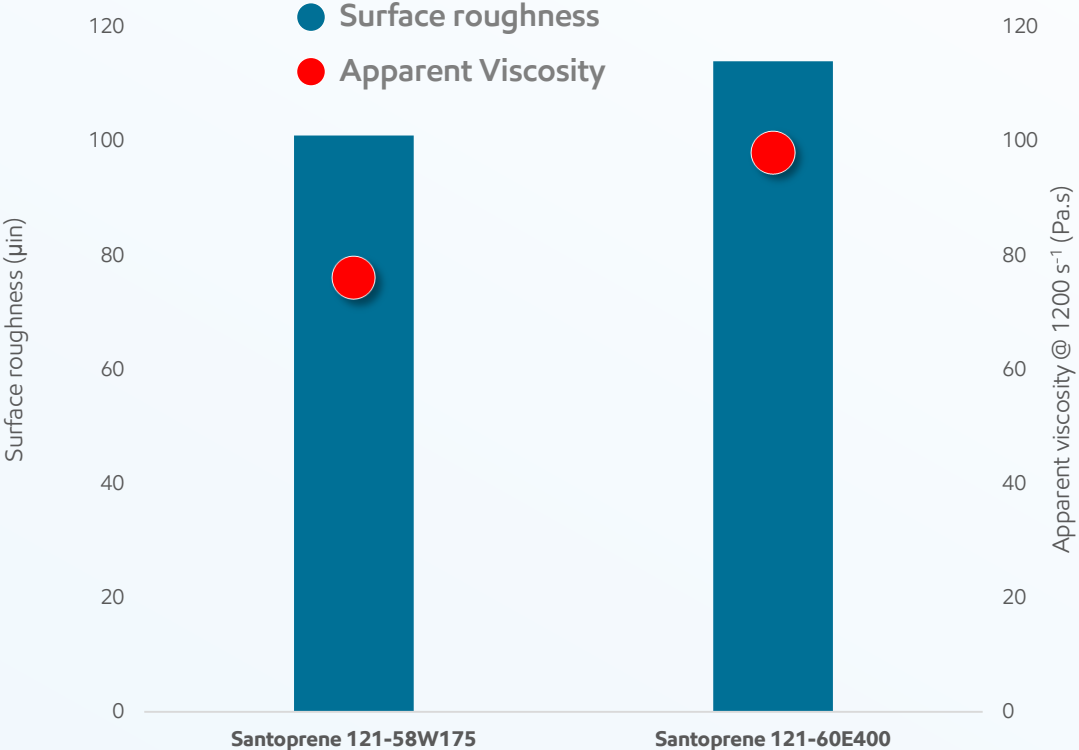
Step-out
improvement in
force retention

Santoprene™ HR 121-60E400 TPV shows **excellent UV resistance** over commercial TPVs



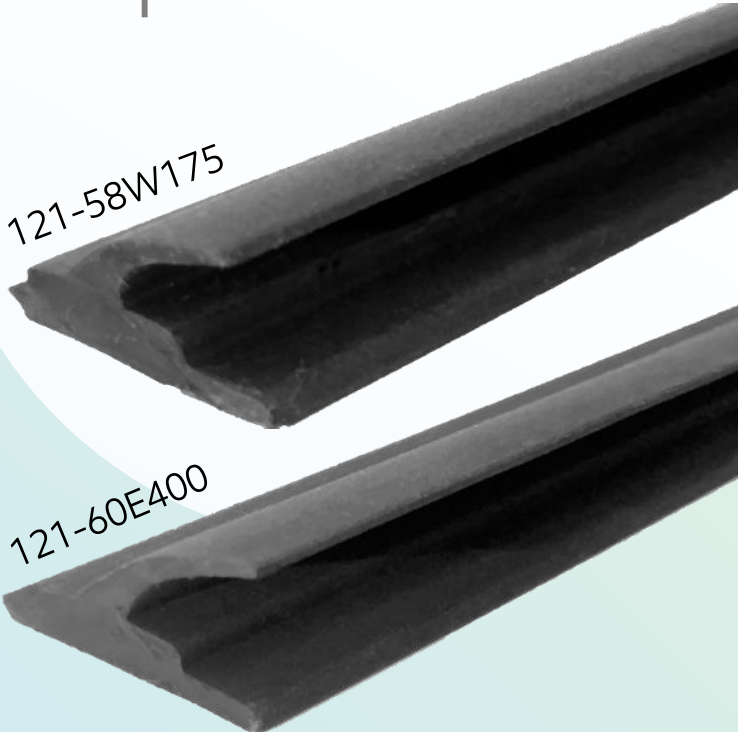
Step-out
improvement in
UV resistance

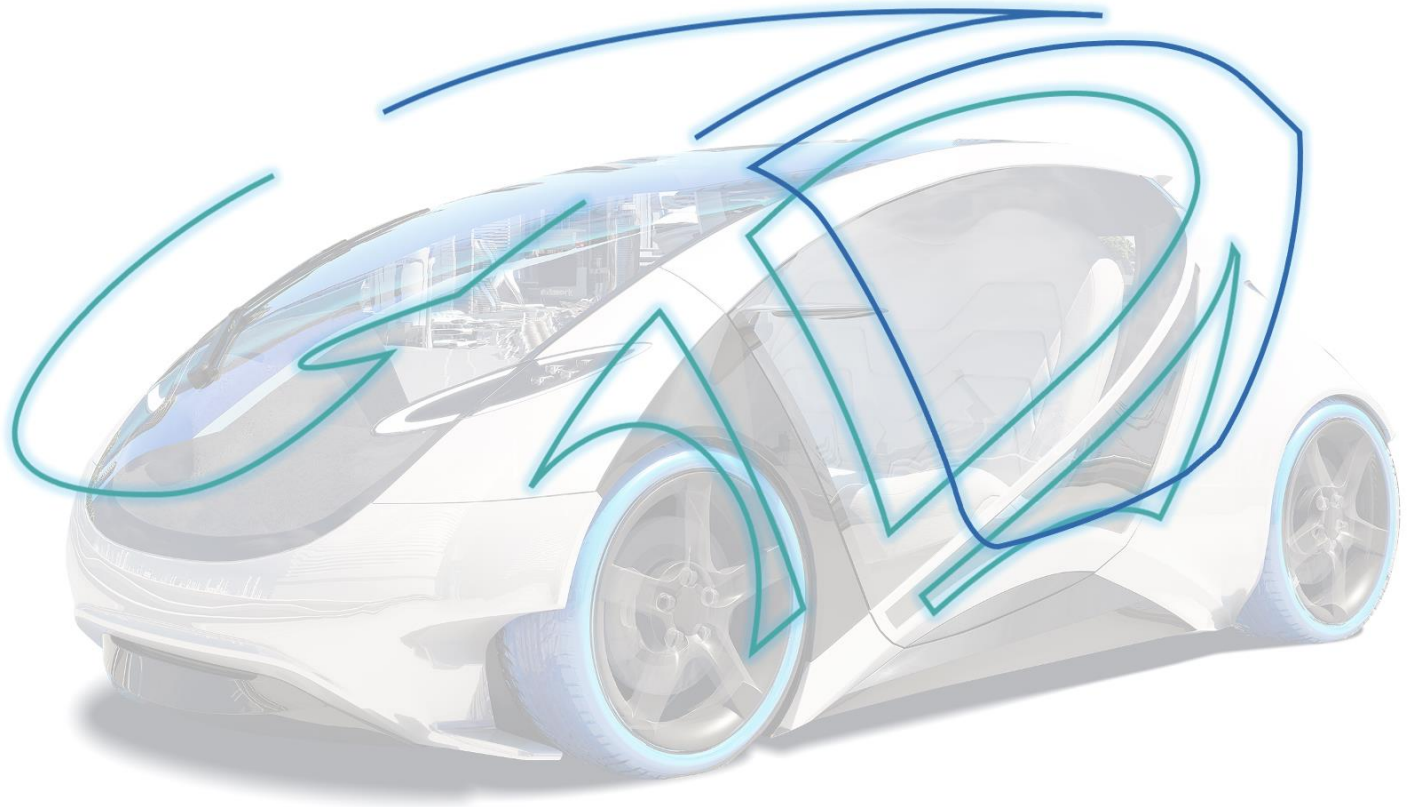
Santoprene™ HR 121-60E400 TPV shows **good surface appearance**



Extrusion surface roughness was measured on a 1" extruded strip according to TPE-0106
Viscosity was measured in a capillary rheometer at 204°C according to TPE-0200

Comparable
extrusion
performance





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