

Dynamex™ SR-C6

Sample Application: Bridge Bearings

Product: Bridge Grade Natural Rubber

Colour: Black

Duro: 55A (Other formulations on request)

Designation: NR, NAT, Virgin Polyisoprene

Specification: CAN/CSA

Format: Full rolls, sheet, strips, cut pieces from 3mm through to 30mm thick. Molded shapes of all sizes and thicknesses

Dynamex™ Bearings for Bridges & Structures meet CAN/CSA-S6 or AASHTO certifications and can be provided in plain, steel-reinforced or fiber-reinforced depending on the application. Reliable performance, exceptional design with some of the fastest lead times in the industry.



Used successfully in a range of applications for over 15 years, **DYNAMEX™ SR-C6** is a proprietary blend of natural rubbers, designed to exceed the demanding requirements of the CAN/CSA-S6-06 Bridge Construction Specification in all Canadian jurisdictions. Molded or cut-to-size from larger slabs, it offers an effective single-element structural bearing in applications with moderate load transfer & movement requirements. **DYNAMEX™ SR-C6** accommodates vertical load and rotation through vertical deflection, while longitudinal and transverse movement is accommodated through shear deformation.

Core Advantages:

- ▶ Exceptional hyperelastic material.
- ▶ Exceptional ozone & weather resistance compared to standard natural rubbers.
- ▶ Exceptional load-bearing and compressive strength especially at low temperatures.



Strong



Elasticity



Energy Dissipative



Ozone Resistant



Weather Resistant

Epic Polymer provides engineering, testing & consulting services for engineered elastomeric bearings. Contact us to discuss your load-bearing applications.

Design Considerations:

- ▶ Not for use in direct exposure to oils & hydrocarbons.
- ▶ For pad sizing and selection in the absence of project specifications or owner design criteria, Epic Polymer recommends contacting us directly for input on design specifications and engineering.

Typical Applications

- ▶ Elastomeric Bridge Bearings
- ▶ Dynamic Spring Isolators (Eg. Astronomical Observatories & Sensitive Research Equipment Isolators)
- ▶ High-rise Building Dampening Systems
- ▶ Water Tower Load Bearings
- ▶ Masonry pads
- ▶ Lighting standard pad seats
- ▶ Handrail bearing pads
- ▶ Pads between structural steel beams, girders, and columns
- ▶ Pads between bridges, roof beams and substructures
- ▶ Shock and vibration isolation
- ▶ Railway-tie pad applications

Toll Free: 1.855.625.8800

www.EpicPolymer.com



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Beyond Industrial Strength™

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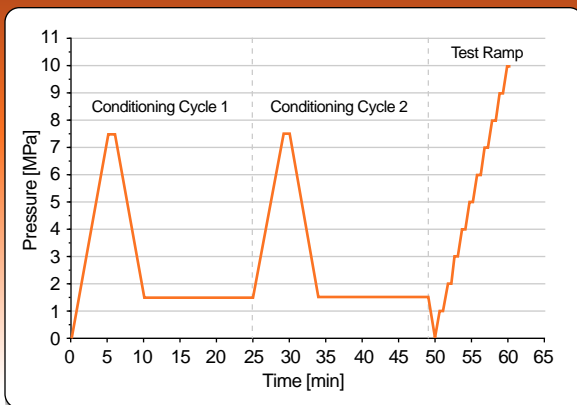
Bridge Grade Natural Rubber

Properties	Specification	Units	Requirement	Typical Value
Code Compliance	CAN/CSA-S6-06			Exceeds
Durometer (Hardness)	ASTM D 2240	Shore 'A'	55 +/-5	55
Density	ASTM D 297	g/cm ³	-	1.10
Tensile Strength	ASTM D 412	MPa	17.0 min.	18.7
Ultimate Elongation	ASTM D 412	%	400 min.	600
Heat Resistance 70 hrs @ +70°C	ASTM D 573			
Durometer (Hardness)		Δ Shore 'A'	+10 max.	+5.0
Tensile Strength		% Δ	-25% max.	-4.8
Ultimate Elongation		% Δ	-25% max.	-6.5
Compression Set 22hr @ +70°C	ASTM D 395, Method B	%	25 max.	20
Ozone Resistance	ASTM D 1149, Mounting Procedure 'A', 20% Strain, +40°C (+/-2°C) 25 pphm, 48 hr	-	No Cracks	PASS
Low Temperature Brittleness @ -40°C	ASTM D 756 Procedure 'B'	-	No Fail	PASS
Low Temperature Crystallinity Increase in Hardness	ASTM D 2240 168 hr @ -25°C	Shore 'A'	+15	+15

All testing performed by ARDL, Akron OH. Unless otherwise stated, all Epic sheet rubber is provided to standard RMA Rubber Tolerances.

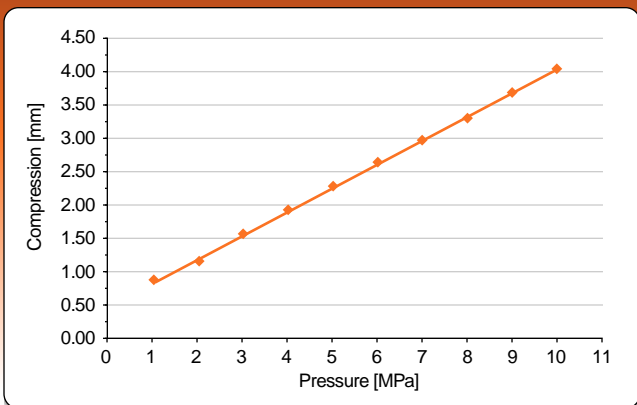
Compression Testing

Conditioning and Test Cycle Profile



Compression Test of a Dynamex™ SR-C6 Pad

90 x 400 x 600 c/w 4 shims



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