

DAI-EL® G-701BP

Characteristics

DAI-EL® G-701BP is a bisphenol curable, gum copolymer. It is designed especially for compression molding applications. Properly compounded, DAI-EL® G-701BP produces vulcanizates with very good heat and compression set resistance.

Properties*	Value
Fluorine content	66%
Specific gravity	1.81
Mooney viscosity (ML1+10@121°C)	41
Color	White to pale yellow
Solubility	Soluble in lower ketones and esters

*Typical properties are not suitable for specification purposes.

Typical Applications

O-rings, seals, gaskets, molded tubing

Form & Packaging

DAI-EL® G-701BP is packaged as slabs with polyethylene film separators sealed in a polyethylene bag. The standard shipping container is a 20 kg (44 lb) net weight carton.

Safety

- (1) Store and use all fluoroelastomers in a well-ventilated area.
- (2) Do not smoke in areas contaminated with dust from fluoroelastomers.
- (3) Avoid eye contact.
- (4) After handling, wash any skin that came in contact with the product with soap & water.

Potential hazards, including evolution of toxic vapors, exist during compounding or processing under high temperatures. Before processing Daikin fluoroelastomers, consult the SDS (Safety Data Sheet) and follow all label directions and handling precautions. Read and follow all directions from other compound ingredient suppliers. Mixing agents that contain metallic particulate such as powdered aluminum can rapidly decompose at high temperatures, and therefore should not be used with this product.

Typical Compound Properties

Test Formula	phr
DAI-EL® G-701BP	100
MT Carbon Black (N-990)	30
Magnesium oxide	3
Calcium hydroxide	6
Bisphenol AF	2
Phosphonium accelerator	0.5

Rheological Properties	MDR 2000	ODR
Temperature: 177°C Frequency: 100 cpm	Strain: 0.5° Test time: 6'	Strain: 3° Test time: 12'
ML (minimum torque), lb-in (dNm)	1.0 (1.1)	8.5 (9.6)
MH (maximum torque), lb-in (dNm)	22.4 (25.3)	112 (127)
t _{s2} (scorch time), minutes	1.3	2.0
t'50 (time to 50% cure), minutes	1.6	3.1
t'90 (time to 90% cure), minutes	2.5	3.4

Physical Properties		
Press Cure	10 min @ 177 °C	5 min @ 177 °C
Post Cure	24 h @ 232 °C	24 h @ 260 °C
Hardness, Shore A	76	77
Tensile strength, MPa (psi)	15.0 (2180)	14.9 (2170)
Elongation at break, %	200	180
100% Modulus, MPa (psi)	6.5 (940)	6.6 (950)
Compression Set, ASTM D395 Method B (#214 O-ring)		
70 hours @ 200 °C, %	17	14

Low Temperature Retraction, ASTM D1329	
TR10, °C	-18

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