

DAI-EL® G-501N

Characteristics

DAI-EL® G-501N is a medium fluorine, bisphenol curable, gum terpolymer designed for transfer and compression molding. It offers a good balance of fluid resistance and low temperature flexibility.

Properties*	Value
Fluorine content	69%
Specific gravity	1.83
Mooney viscosity (ML1+10@121°C)	64
Color	White to milky white
Solubility	Soluble in lower ketones and esters

*Typical properties are not suitable for specification purposes.

Typical Applications

Molded o-rings, seals and gaskets

Form & Packaging

DAI-EL® G-501N 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 fluoroelastomer, 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-501N	100
MT Carbon Black (N-990)	30
Magnesium oxide	3
Calcium hydroxide	6
Bisphenol AF	2
Phosphonium accelerator	0.5

Rheological Properties	ODR	MDR
Temperature: 177°C Frequency: 100 cpm	Strain: 3° Test time: 12'	Strain: 0.5° Test time: 6'
ML (min torque), lb-in (dN-m)	13.0 (14.7)	1.5 (1.7)
MH (max torque), lb-in (dN-m)	99.0 (112)	22.1 (25.0)
t _{s2} (scorch time), minutes	3.1	3.1
t'90 (time to 90% cure), minutes	7.6	5.3

Physical Properties	
Press Cure	10 min at 177 °C
Post Cure	24 h @ 232 °C
Hardness, Shore A	77
Tensile strength, MPa (psi)	15.6 (2270)
Elongation at break, %	250
100% Modulus, MPa (psi)	5.4 (780)
Compression Set, ASTM D395 Method B (#214 O-ring)	
70 hours @ 200 °C, %	14.1

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

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