

DAI-EL® G-912

Characteristics

DAI-EL® G-912 is a terpolymer suitable for various peroxide cure systems. DAI-EL® G-912 can be formulated to eliminate the post cure process.

DAI-EL® G-912 is suitable for compression molding applications requiring excellent chemical and steam resistance. Used alone or in blends with other DAI-EL® grades it produces finished parts with higher modulus and lower compression set.

Properties*	Value
Fluorine content	71 %
Specific gravity	1.91
Mooney viscosity (ML1+10@121°C)	56
Color	White to light pink
Solubility	Soluble in lower ketones and esters

*Typical properties are not suitable for specification purposes.

Typical Applications

O-Rings, gaskets, seals, parts

Form & Packaging

DAI-EL® G-912 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-912	100
MT Carbon Black (N-990)	30
TAIC (72% activity)	4
Peroxide (50% activity)	3
Zinc Oxide	3

Rheological Properties	MDR 2000
Temperature: 177°C Frequency: 100 cpm	Strain: 0.5' Test Time: 6 min.
ML (minimum torque), lb-in (dNm)	0.9 (1.0)
MH (maximum torque), lb-in (dNm)	25.5 (28.8)
t _s 2 (scorch time), minutes	0.8
t'50 (time to 50% cure), minutes	1.1
t'90 (time to 90% cure), minutes	1.8

Physical Properties	
Press Cure	10 min @ 177 °C
Post Cure	4 hrs @ 200 °C
Hardness, Shore A	78
Tensile strength, MPa (psi)	24.1 (3500)
Elongation at break, %	180
100% Tensile Stress, MPa (psi)	10.5 (1520)
Compression Set, ASTM D395 Method B (#214 O-ring)	
70 hours @ 200°C (392°F), %	14

Low Temperature Properties	
Embrittlement Temperature, °C	-20
Temperature Retraction	
TR ₁₀ , °C	-8.0

Air-oven Aging Properties – 70 hours @ 232°C	
Change in Hardness, pts. Shore A	0
Change in Tensile strength, %	-13
Elongation change rate, %	-5

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