

DAI-EL® G-8002

Characteristics

DAI-EL® G-8002 is a peroxide curable copolymer designed for injection molding.

DAI-EL® G-8002 can be formulated with various peroxide cure systems and can be used for co-extrusion with other elastomers.

DAI-EL® G-8002 provides superior mechanical properties.

In comparison to bisphenol cured fluoroelastomers, this material gives better resistance to steam and aqueous solutions.

Properties*	Value
Fluorine content	66%
Specific gravity	1.81
Mooney viscosity (ML1+10@121°C)	25
Color	White to pale brown
Solubility	Soluble in lower ketones and esters

*Typical properties are not suitable for specification purposes.

Typical Applications

Turbo charge hoses, fuel hoses, gaskets, O-rings, seals

Form & Packaging

DAI-EL® G-8002 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-8002	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'
ML (minimum torque), lb-in (dNm)	0.5 (0.5)
MH (maximum torque), lb-in (dNm)	20.3 (22.9)
t _{s2} (scorch time), minutes	0.46
t'50 (time to 50% cure), minutes	0.59
t'90 (time to 90% cure), minutes	0.78

Physical Properties	
Press Cure	10 min @ 177 °C
Post Cure	4 hrs @ 200 °C
Hardness, Shore A	71
Tensile strength, psi (MPa)	3180 (21.9)
Elongation at break, %	350
100% Tensile Stress, psi (MPa)	500 (3.5)
Compression Set, ASTM D395 Method B	
70 hours @ 175°C (347°F), %	4
70 hours @ 200°C (392°F), %	12

Low Temperature Properties	
Temperature Retraction, ASTM D1329	
TR ₁₀ , °C	-19.0

Air Oven Aging 70 hours @ 200°C	
Tensile Strength Change Rate, %	5.9
Elongation Change Rate, %	-0.9

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