TECHNICAL DATA SHEET

DAI-EL® G-501NK

Characteristics

DAI-EL® G-501NK is a terpolymer for use with diamine cure systems.

Its high viscosity makes it suitable for compression molding applications.

G-501NK can be cured with low activity magnesium oxide and diamine.

Properties*	Value
Fluorine content	68%
Specific gravity	1.84
Mooney viscosity (ML1+10@121°C)	74
Color	White to milky white
Solubility	Soluble in lower ketones and esters

***Typical properties are not suitable for specification purposes.**

Typical Applications

Gaskets, oil seals, diaphragm

Form & Packaging

DAI-EL® G-501NK 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-501NK	100
MT Carbon Black (N-990)	20
Magnesium oxide, low activity	15
Curing agent V-3	3

Rheological Properties	
t'90 @ 160°C (time to 90% cure), minutes	5.1

Physical Properties	
Press Cure Post Cure	20 min at 160 °C 24 h @ 200 °C
Hardness, Shore A	75
Tensile strength, MPa (psi)	17.4 (2520)
Elongation at break, %	280
100% Modulus, MPa (psi)	4.1 (600)

Compression Set	
70 hours @ 25°C (77°F), %	30
70 hours @ 100°C (212°F), %	31
70 hours @ 175°C (347°F), %	30
70 hours @ 200°C (392°F), %	65

Low Temperature Properties	
Embrittlement temperature, °C	-31
Gehman torsion test T_2, °C	-8.5
Gehman torsion test T_{10}, °C	-14.5
TR10, °C	-16
TR70, °C	-8

Air-oven Aging – 70hrs @ 230°C	
Tensile strength change, %	-15
Elongation change, %	10
Hardness change	+1

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