

DAI-EL® LT-304

Characteristics

DAI-EL® LT-304 is a peroxide curable terpolymer suitable for applications that require good low temperature flexibility and compression set resistance. Compounds of DAI-EL® LT-304 may be compression, transfer or injection molded with low mold fouling and excellent mold release. DAI-EL® LT-304 may be formulated with various peroxides to eliminate postcuring.

Properties*	Value
Fluorine content	65%
Specific gravity	1.79
Mooney viscosity (ML1+10@121°C)	26
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

Form & Packaging

DAI-EL® LT-304 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® LT-304	100
MT Carbon Black (N-990)	30
TAIC (72% activity)	4
Peroxide (50% activity)	3
Zinc Oxide	3

Rheological Properties

Temperature: 177°C Frequency: 100 cpm	Strain: 0.5° Test time: 6'
ML (minimum torque), lb-in (dNm)	0.6 (0.7)
MH (maximum torque), lb-in (dNm)	25.7 (29.0)
t _{s2} (scorch time), minutes	0.4
t'50 (time to 50% cure), minutes	0.5
t'90 (time to 90% cure), minutes	0.7

Physical Properties

Press Cure	10 min @ 177 °C
Post Cure	4 hrs @ 200 °C
Hardness, Shore A	73
Tensile strength, MPa (psi)	15.3 (2230)
Elongation at break, %	170
100% Tensile Stress, MPa (psi)	6.4 (930)
Compression Set, ASTM D395 Method B (#214 O-ring)	
70 hours @ 175°C (347°F), %	10
70 hours @ 200°C (392°F), %	18

Low Temperature Properties

Temperature Retraction, ASTM D1329	
TR ₁₀ , °C	-30.0

Air Oven Aging - 70 hours @ 200°C

Tensile Strength Change, %	17.7
Elongation Change, %	5.8

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