

DAI-EL® LT-252

Characteristics

DAI-EL® LT-252 is a terpolymer suitable for various peroxide cure systems. DAI-EL® LT-252 can be formulated to eliminate the post cure process. DAI-EL® LT-252 is designed for transfer and compression molding applications that require a balance between good low temperature flexibility and fuel resistance.

| Properties* | Value |
|---------------------------------|-------------------------------------|
| Fluorine content | 66% |
| Specific gravity | 1.83 |
| Mooney viscosity (ML1+10@121°C) | 35 |
| 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® LT-252 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-252 | 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) | 0.3 (0.3) |
| MH (maximum torque), lb-in (dNm) | 24.8 (28.0) |
| 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) | 17.6 (2550) |
| Elongation at break, % | 230 |
| 100% Tensile Stress, MPa (psi) | 3.9 (570) |
| Compression Set, ASTM D395 Method B (#214 O-ring) | |
| 70 hours @ 175°C (347°F), % | 18 |
| 70 hours @ 200°C (392°F), % | 29 |

| Low Temperature Properties | |
|------------------------------------|-------|
| Temperature Retraction, ASTM D1329 | |
| TR ₁₀ , °C | -25.0 |

| Air Oven Aging 70 hours @ 200°C | |
|---------------------------------|-----|
| Tensile Strength Change Rate, % | 6.3 |
| Elongation Change Rate, % | 0.4 |

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