

DAI-EL® G-802

Characteristics

DAI-EL® G-802 is a peroxide curable copolymer with lower Mooney viscosity suitable for injection and transfer molding.

DAI-EL® G-802 can be formulated with various peroxide cure systems to eliminate the need for post cure.

DAI-EL® G-802 provides superior mechanical properties and resistance to steam and aqueous solvents compared with bisphenol cured fluoroelastomers.

DAI-EL® G-802 may be used in compliance with 21 CFR 177.2600, Rubber articles intended for repeated use. Finished articles are required to comply with the end tests specified in 21 CFR 177.2600 (e) or (f), as applicable.

| Properties* | Value |
|---------------------------------|-------------------------------------|
| Fluorine content | 66% |
| Specific gravity | 1.81 |
| Mooney viscosity (ML1+10@121°C) | 20 |
| 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® G-802 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-802 | 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) | 16.3 (18.4) |
| t _{s2} (scorch time), minutes | 0.4 |
| t'50 (time to 50% cure), minutes | 0.6 |
| 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 | 70 |
| Tensile strength, MPa (psi) | 21.3 (3080) |
| Elongation at break, % | 390 |
| 100% Tensile Stress, MPa (psi) | 2.8 (410) |
| Compression Set, ASTM D395 Method B (#214 O-ring) | |
| 70 hours @ 175°C (347°F), % | 21 |
| 70 hours @ 200°C (392°F), % | 31 |

| Low Temperature Properties | |
|-----------------------------------|-------|
| Embrittlement Temperature, °C | -25 |
| Gehman Torsion ASTM 1053-92A | |
| T ₂ , °C | -10.0 |
| T ₁₀ , °C | -15.5 |
| Temperature Retraction, ASM D1329 | |
| TR ₁₀ , °C | -19.0 |
| TR ₇₀ , °C | -10.0 |

| Air Oven Aging 70 hours @ 200°C | |
|---------------------------------|------|
| Tensile Strength Change Rate, % | 0.4 |
| Elongation Change Rate, % | -2.6 |

All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee, warranty or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement, and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated, or that other measures may not be required. This product is not specifically designed or manufactured for use in implantable medical and/or dental devices. We have not tested it for such application and will only sell it for such use pursuant to contract containing specific terms and conditions required by DAIKIN.

DAIKIN AMERICA, INC.

20 Olympic Drive
Orangeburg, NY 10962
Customer Service: 800-365-9570
Fax: 845-365-9598
<http://www.daikin-america.com>

DAIKIN INDUSTRIES, LTD.

Umeda Center Building
2-4-12 Nakasaki-Nishi, Kita-Ku
Osaka 530-8323 Japan
Phone: +81-6-67374-9355
Fax: +81-6-6374-4281
<http://www.daikin.com>

DAIKIN CHEMICAL EUROPE GmbH

Immermannstr, 65D
40210 Dusseldorf, Germany
Phone: +49-211-1792250
Fax: +49-211-1640732