DAIKIN

TECHNICAL DATA SHEET

DAI-EL G-EXP-090

Characteristics

DAI-EL G-EXP-090 is a cure incorporated copolymer with medium Mooney viscosity.

It is designed for compression molding of O-rings, seals, and other parts where fast cure speed and process safety are required.

Properties*	Value
Fluorine content	66%
Specific gravity	1.81
Mooney viscosity (ML_{1+10} @ 121°C)	30
Color	White to cream
Solubility	Soluble in lower ketones and esters

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

Typical Applications

O-rings, seals, gaskets, molded tubing

Form & Packaging

DAI-EL G-EXP-090 is packaged as slabs with polyethylene film separators 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-EXP-090	100
MT Carbon Black (N-990)	30
Calcium hydroxide	6
Magnesium oxide	3

Rheological Properties	MDR 2000
Temperature: 177°C Frequency: 100 cpm	Strain: 0.5° Test time: 6 min
ML (minimum torque), lb-in (dNm)	1.0 (1.1)
MH (maximum torque), lb-in (dNm)	14.7 (16.6)
t_S2 (scorch time), minutes	0.9
t'50 (time to 50% cure), minutes	1.1
t'90 (time to 90% cure), minutes	1.9

Physical Properties	
Press Cure Post Cure	10 min @ 177 °C 24 h @ 232 °C
Hardness, Shore A	76
Tensile strength, MPa (psi)	13.8 (2000)
Elongation at break, %	250
50% Modulus, MPa (psi)	2.5 (370)
100% Modulus, MPa (psi)	4.5 (660)

Low Temperature Retraction, ASTM D1329	
TR10, °C	-18

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