

FKM A-401C-G2

Introduction ▶

FKM A-401C-G2 fluoroelastomer is an incorporated cure dipolymer designed for compression molding of sealing devices that must meet specific fluoroelastomer specifications. In addition to the heat and chemical resistance characteristics typical of fluoroelastomers, FKM A-401C-G2 offers excellent performances in processing and rheology. FKM A-401C-G2 can be blended with similar FKM dipolymer to provide variations in processing, properties, and shrinkage.

Features ▶

- Fully precompounded
 - O-ring curative level
- Compression molding
 - increased mold flow
 - Easy mold release
 - Less mold fouling
- Stable compression set resistance

Product Description	FKM A-401C-G2
Chemical Composition	Dipolymer of hexafluoropropylene and vinylidene fluoride, plus cure chemicals
Physical form	sheet
Odor	None
Mooney Viscosity (ML1+10 at 121°C)	48
Specific Gravity	1.81
Storage Stability	Excellent
Solubility	Low molecular weight esters and ketones

Applications ▶

FKM A-401C-G2 is highly recommended for O-rings, extruded cord, gaskets, seals, and profiles. FKM A-401C-G2 can be formulated to meet fluoroelastomer specifications Mil-R-83248B, AMS 7276D and AMS 7259A.

Safety and Handling ▶

Keep off skin and wash well after handling. For the safe handling of other compounding ingredients, refer to the respective manufacturers' literature



Table 1. Performance of FKM A-401C-G2 in typical compound

Formulation of Full Compound ▶

Ingredients	FKM A-401C-G2
FKM A-401C-G2	100
N990 MT carbon black	30
Calcium hydroxide	6
Magnesium oxide (High activity)	3

Rheology Properties ▶

Mooney Viscosity (ML 1+10 at 121°C)	79
MDR at 177°C, 0.5arc, 8min	
ML [dNm]	1.9
MH [dNm]	33.3
Ts1 [min]	1.1
T90 [min]	2.6

Physical Properties ▶

Slab cure 10min at 177°C	
Post cure: 24h at 230 °C	
Stress/strain at 23°C-original	
Tensile properties [MPa]	15.9
Elongation at break [%]	208
Modulus at 100 % [MPa]	7.2
Hardness, shore A, points	81
Stress/strain at 23°C-After ageing 70h for at 275 °C	
Tensile properties [MPa]	12.5
Elongation at break [%]	234
Modulus at 100 % [MPa]	5.2
Hardness, shore A, points	81
Compression set, %, Type B, 25% Deflection	
70 hours at 200°C	19