

Material Properties

General Purpose EPDM (E70)

Material code: 301

The General purpose EPDM is a peroxide cured material typically used in automotive brake applications.

NOTE - All testing done on AS568-214 size O-rings

Original Properties	Typical Values
Hardness, Shore A, ASTM D2240	78
Tensile Strength, psi, ASTM D1414	1985
Elongation, %, ASTM D1414	171
Specific Gravity, ASTM D297	1.86
Temperature Retraction, ASTM D1329	
TR-10, degrees F	-7
Heat Aged ASTM D573, 168 hrs. at 482°F	
Hardness change, Shore A, ASTM D2240	-3
% Tensile Strength change, ASTM D1414	-32
% Elongation change, ASTM D1414	+27
% Weight loss, ASTM D297	1.0
Compression Set, ASTM D395 Method B and ASTM D1414, times, temperatures and fluids as shown	
% Permanent set, 22 hrs. at 392°F	19
% Permanent set, 70 hrs. at 392°F	42
Fluid immersions, ASTM D471 and ASTM D1414, time, temperatures and fluid as shown	
% Volume change, ASTM D471, MEK, 168 hrs. at 74°F	+25
% Volume change, ASTM D471, Ethyl Acetate, 168 hrs. at 74°F	+25
% Volume change, ASTM D471, 45% KOH in water, 70 hrs. at 158°F	+0.3
% Volume change, ASTM D471, 70% Nitric Acid in water, 70 hrs. at 158°F	+9.7
% Volume change, ASTM D471, Water, 168 hrs. at 212°F	+1.7

Note: Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, and based upon laboratory and real-world tests believe to be reliable and practical. However, K.C. Seals, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customers' responsibility to determine product suitability to any given application.

