

Material Properties: Z7257 (FFKM)

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

Original Properties	AMS-7257	Z7257
Hardness, Shore A, ASTM D2240	70 to 80	77
Tensile Strength, MPa, ASTM D1414	10.3 min.	16.9
Tensile Strength, psi, ASTM D1414	1500 min.	2458
Elongation, %, ASTM D1414	120 min.	177
Temperature Retraction, ASTM D1329		
TR-10, degrees F	+5 max.	+4
Compression Set, ASTM D395 Method B and ASTM D1414, 22 hrs. at 230°C		
% Permanent Set	40 max.	29
Air Aging ASTM D573, 70 hrs. at 290°C		
Hardness change, Shore A, ASTM D2240	± 5	0
% Tensile Strength change, ASTM D1414	-20 max.	-9
% Elongation change, ASTM D1414	-5 max.	+12
% Weight loss, ASTM D297	-5 max.	-1
AMS 3021 Fluid Immersion, ASTM D471 and ASTM D1414. 70 hrs. at 175°C		
Hardness change, Shore A, ASTM D2240	± 5	+1
% Tensile Strength change, ASTM D1414	-10 max.	-9
% Elongation change, ASTM D1414	-15 max.	-7
% Volume change, ASTM D471	0 to +5	+1
ASTM Reference Fuel B Immersion, ASTM D471 and ASTM D1414, 70 hrs. at 24°C		
Hardness change, Shore A, ASTM D2240	± 5	0
% Tensile Strength change, ASTM D1414	-20 max.	-6
% Elongation change, ASTM D1414	-15 max.	-7
% Volume change, ASTM D471	0 to +5	+1
SKYDROL LD4 Fluid Immersion, ASTM D471 and ASTM D1414, 70 hrs. at 125°C		
Hardness change, Shore A, ASTM D2240	-15 to 0	-1
% Tensile Strength change, ASTM D1414	-40 max.	+6
% Elongation change, ASTM D1414	-15 max.	+2
% Volume change, ASTM D471	0 to +15	+3



Seal & Design
Corporate Headquarters
 Ph: (716)-759-3344
 Info@SealAndDesign.com
 www.SealAndDesign.com