

# Material Properties

## FDA Compliant FKM (V178)

### Material code: 278

The FDA Compliant FKM is tested and certified to USP Class VI. This material meets FDA requirements, 21 CFR 177.2600, for repeated food contact. As well as being tested and certified to USDA 3A sanitary standard number 18-02 classes I, II, III, IV.

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

<b>Original Properties</b>	<b>AMS-7276 and MIL-R-83248 Type 1 Class 1</b>	<b>Typical Values</b>
Hardness, Shore A, ASTM D2240	75 ±5	74
Tensile Strength, psi, ASTM D412 Die C	1450 min.	2204
Ultimate Elongation, %, ASTM D412 Die C	175	182
<b>Air Aging ASTM D573, 70 hrs. at 482°F</b>		
Hardness change, Shore A, ASTM D2240	+10 max.	+1
% Tensile Strength change, ASTM D412 Die C	-25 max.	-7
% Elongation change, ASTM D412 Die C	-25 max.	-8
<b>Compression Set, ASTM D395 Method B, 22 hrs. at 392°F</b>		
% Permanent set	50 max.	7.6
<b>ASTM Reference Fuel C Immersion, ASTM D471, 70hrs. at 74°F</b>		
Hardness change, Shore A, ASTM D2240	±5	-3
% Tensile Strength change, ASTM D412 Die C	-25 max.	-21
% Elongation change, ASTM D412 Die C	-20 max.	-15
% Volume change, ASTM D471	0 to +10	+3
<b>Low Temperature Brittleness, ASTM D2137</b>		
3 minutes at -13°F	No cracks	Pass

**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.

