

Material Properties: V178 (FKM)

Specification: ASTM D2000 / SAE J200 M2HK 710 A1-10 B37 B38 EF31 F15 Z

1. Tested and Certified to USP Class VI
2. This material meets FDA requirements, 21 CFR 177.2600, for repeated food contact
3. This material has been tested to and is certified to USDA 3A Sanitary Standard Number 18-02 Classes I, II, III, and IV

Original Properties (710)	Specification	V178
Hardness, Shore A, ASTM D2240 (Z = 75 ± 5)	75 ± 5	74
Tensile Strength, MPa, ASTM D412 Die C	10.0 min.	15.2
Tensile Strength, psi, ASTM D412 Die C	1450 min.	2204
Ultimate Elongation, %, ASTM D412 Die C	175 min.	182
Air Aging ASTM D573, 70 hrs. at 250°C (A1-10)		
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
Compression Set, ASTM D395 Method B, 22 hrs. at 200°C, Plied discs (B37)		
% Permanent set	50 max.	7.6
Compression Set, ASTM D395 Method B, 22 hrs. at 200°C, Plied discs (B38)		
% Permanent set	50 max.	8.0
ASTM Reference Fuel C Immersion, ASTM D471, 70 hrs. at 23°C (EF31)		
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
Low Temperature Brittleness, ASTM D2137 (F15)		
3 minutes at -25°C	No cracks	Pass

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