



Porter Seal Denver
558 E. Castle Pines Parkway,
Suite B4-318
Castle Pines, CO 80108
www.portersealdenver.com

Compound Technical Report Silicone 70, FDA

Silicone offers a broad temperature range, from -80° F to +400° F, and excellent dry heat resistance. Our silicone compounds are inert and guarantee complete compliance to ASTM, military and FDA specifications required by food, medical, electrical and filter manufacturers. They are not used in a dynamic seals because of relatively poor tensile, tear and abrasion resistance.

ASTM Designation	MIL-R-83248C/1	Actual Result
Original properties		
Durometer, Shore A	70 ± 5	76
Tensile, psi (MPa), min.	875	995
Elongation, % min	150	175
A19 Heat age, 70 hrs @ 225° C		
Durometer change, points	+ 10	+ 4
Tensile strength change, % max	- 25	- 14.3
Elongation change, % max	- 30	- 18.4
B37 Compression Set, 22 hrs @ 175° C		
% original deflection, max	25	12.4
EO16 ASTM # 1 oil, 70 hrs @ 150° C		
Durometer change, points	0 / -15	- 7
Tensile change, % max	- 20	- 2.9
Elongation change, % max	- 20	0
Volume change, % max	0 / +10	+ 6.4
EO36 ASTM # 3 oil, 70 hrs @ 150° C		
Durometer change, points	- 30	- 20
Volume change, % max	60	+ 35
EA14 Water resistance, 70 hrs @ 100° C		
Durometer change, points	+ 5	- 1
Volume change, % max	5	+ 2.5
F19 Low temp. brittleness		
ASTM D2137, Method A		
3 minutes @ - 55° C	Pass	Pass
3 minutes @ - 65° C	Pass	Pass
G11 Tear resistance, die B		
ppi (kN/m)	51 (9)	107 (10)

Specifications met:

ASTM D2000-01 Grade M5GE706 A19 B37 EO16 EO36 EA14 F19 G11
ZZ-R-765B Class 2a & 2a, Grade 70 and FDA per CFR 177.2600

Silicone is Recommended for
High temperature (dry heat)
Low Temperatures
High aniline point oil

Silicone is NOT Recommended for
Most petroleum oils
Ketones
Dynamic applications

Serving Industry with High Quality Products and Services for over 40 Years
ph 303 799-1605 fax 303 799-1385 email: info@portersealdenver.com
www.portersealdenver.com