

BOYD CORPORATION

TECHNICAL REPORT E300-70 SULFUR-CURED EPDM COMPOUND

GENERAL PROPERTIES

Sulfur-Cured EPDM Compound Systems have a temperature use range of -65F to +300F. Steam service, however, is rated at up to 400F. Sulfur-Cured EPDM is the least costly and provides the best Tear and Abrasion Resistance compared to Peroxide-Cured Systems. EPDM Compounds are frequently used with foods, water and steam applications and offer the best resistance to ozone and weathering. EPDM's are not used with petroleum oils or fuels because significant swelling would result.

<u>ASTM Designation</u>	<u>ORIGINAL PROPERTIES</u>	<u>ASTM D2000 SPECIFICATION</u>	E300-70 <u>LABORATORY PROPERTY</u>
	Durometer, Shore A	70 +/- 5	71
	Tensile, psi (MPa), Minimum	1450 (10)	2140 (14.8)
	Elongation, % Minimum	200	310
	Specific Gravity	-	1.17
A25	<u>HEAT AGE, 70 HRS @ 125 C</u>		
	Durometer Change, Points	+10	+4
	Tensile Strength Change, % Maximum	-20	-3
	Elongation Change, % Maximum	-40	-16
B35	<u>COMPRESSION SET, 22 HRS @ 125 C</u>		
	Original Deflection, % Maximum	50	42
C32	<u>RESISTANCE TO OZONE</u>		
	ASTM D1171, Method B	Pass	Pass
EA14	<u>WATER RESISTANCE, 70 HRS @ 100 C</u>		
	Volume Change, %	+/-5	+1.6
F17	<u>LOW TEMPERATURE BRITTLINESS</u>		
	ASTM D2137, Method A, 9.3.2		
	3 Minutes @ -40 C	Non-Brittle	Pass
G21	<u>TEAR RESISTANCE</u>		
	Method D 624, Die C, Minimum kN/m	26	38

SPECIFICATIONS MET

* ASTM D2000 Grade M5CA710 A25 B35 C32 EA14 F17 G21

* FDA CFR 177.2600

MANUFACTURER'S CROSS REFERENCE

E300-70 is designed to meet or exceed the properties of these popular EPDM Compounds: E603-70, E1028-70, 3077, E14, E17016, 5601-70 and 559N.