Polymer Works, Hope Street
Dudley, West Midlands DY2 8RS

t: 01384 252555
f: 01384 252373
e: technical@advancedseals.co.uk

http://www.advancedseals.co.uk

Specification Sheet / 01
A311 FR (S) Closed Cell Expanded Neoprene

Certificate No. 11738-EMS-001
ISO 9001:2015 ISO 14001:2015

Property	***Unit***	***Result***	***Test Method***
Specification according to:			
ASTM D1056-85			2 A2 A1 B2 MP
AFNOR NFR99-211-80			3C 08 B4
SAE J18-79			SCE 42 A1 B2 MP
Dimensions		1900mm X 1000mm	
Colour		Grey	
Thickness		37mm ± 2mm	
Cellular Structure		Closed	
Appearance Density	kg/m³	170 / 220	
Shore hardness		38-55	
Compression deflection 25 % deflection	kPa	35-63 (49.3)	ASTM D1056
Compression deflection 50 % deflection	kPa	80 –160 (124.5)	NFR 9921180
Change in comp deflection	%	± 30 (16.8)	ASTMD1056 after 7 Days at 70°C
Change in comp deflection	%	± 30 (19.2)	ASTM D1056 after 23 hours at 100°C
Water absorption	%	<5 (0.9)	ASTM D1056
Compression set 50 % deflection 22 h 23 °C	%	< 25 (16.9)	ASTM D1056 at 23°C
Compression set 50 % deflection 22 h 23 °C	%	< 60 (47.9)	HFR 99211 at 40°C
Linear Shrinkage after 7 days at 70°C	%	<5 (3.8)	
Ultimate Elongation 247% > 200%	%	> 200 (247)	DIN 535 1
Tensile Strength	Kpa	>550 (765)	DIN 535 1
Tear Resistance	kN/m	> 0.6 (0.94)	NFR 99211 80
Tear Resistance	kN/m	> 2 (3.09)	ASTM D624 73
Ozone Resistance		200 pphm 30°C/48h, No Cracking	
Resistance to fuel	% Change in weight after 7 days	< 250 (192)	
Fire Resistance		Conforms to cat. 1 for thickness >4mm. 94VO and 94HB. M1 for 2 & 3mm. M2 for 3 to 15mm. M3 from 15 to 25mm	FMVSS 302, UL94, AFNOR P9750
Corrosion on silver & copper		Non Corrosive	
Temperature Range	Continuous	-40°C to +115°C	
Temperature range	Intermittent	up to 130°C	
General Indications		Good resistance to flame, oils, ageing and chemicals	

Polymer Works, Hope Street
Dudley, West Midlands DY2 8RS

t: 01384 252555
f: 01384 252373
e: technical@advancedseals.co.uk

http://www.advancedseals.co.uk

Specification Sheet / 02
A311 FR (S) Closed Cell Expanded Neoprene

8320
Certificate No. 11738-EMS-001
ISO 9001:2015 ISO 14001:2015

Change Control Date	***Change***
02/08/2013	Created

The above figures are average values.
We recommend that you examine any material you select to ensure its suitability for your application.
Tolerance(s) applied in accordance with ASG specification No WI007 (https://bit.ly/3nKm6Hj) unless otherwise stated.
Our standard terms and conditions of trading (https://bit.ly/3b3mThw) apply at all times.