



MATERIAL PROPERTY TEST REPORT

Test Standard: Ford WSS-M99P32-C (2015)

Material Type: Expanded Polypropylene Foam HB Series

Testing Completed & Certified by: MGA Labs. Greer, SC, USA (A2LA Cert. 850.02)

Densities g/l: 30, 45, 50 & 60

Physical Property Data		Ford Standard: WSS-M99P32-C								Method		
Weight Density Tested	698	(g/m ²)	990	(g/m ²)	1154	(g/m ²)	1517	(g/m ²)	FLTM BN 106-01			
	30	(g/L)	45	(g/L)	50	(g/L)	60	(g/L)				
ODOR	≤ 3 rating	2	≤ 3 rating	2	≤ 3 rating	2	≤ 3 rating	2	FLTM BO -131-03			
Fogging (R16/R ₀ x 100)	≥ 70	99	≥ 70	100	≥ 70	99.7	≥ 70	100	SAE J1756			
Resistance to Mildew (No Mildew or Odor)	Pass		Pass		Pass		Pass		Standard			
Short Term Heat, Humidity & Cold (No objectionable appearance changes)	Pass		Pass		Pass		Pass		Standard			
Long Term Heat Exposure 7days @ 80°C (No objectionable appearance changes)	Pass		Pass		Pass		Pass		Standard			
Tensile Strength As Received 48 Hrs. @38°C & 95% RH 7 days @ 80°C After 48 hrs. water submersion	N/cm ²		N/cm ²		N/cm ²		N/cm ²		ASTM5034			
	≥ 10	37	- 30	45	- 30	47	- 30	50				
		36		43		5		49		-4	49	2
		35		41		8		50		-6	45	10
		35		42		7		51		-8	54	-8
Tear Strength	> 250 N/m	790	> 250 N/m	800	> 250 N/m	1166	> 250 N/m	1400	ASTM 3574			
Compression Set	≤ 50%	49	≤ 50%	50	≤ 50%	49	≤ 50%	46				
Resistance to Insulators to Various Test Reagents Deionized Water 3 % Salt (NaCl) Solution Engine Oil Resistance Break Fluid Sulfuric Acid Long Life Coolant Transmission/Power Steering Fluid Windshield Washer Fluid	PASS		PASS		PASS		PASS		Standard			
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
	PASS		PASS		PASS		PASS					
Moisture Absorption	≤ 30	0.36	≤ 30	1.13	≤ 30	0.18	≤ 30	0.13	Standard			
Flammability Burn Rate < 101mm/min	69		47		46.8		36		SAE J369 FMVSS-302			
Corrosiveness to Steel	PASS		PASS		PASS		PASS		SAE J1389			
Low Temp Flexibility (-40oC for 5 Hrs)	Pass		Pass		Pass		Pass		FLTM BN 102-01			

This report certifies that the above material meets the requirements for the Production Part Approval Process per the Ford Motors Engineering Specification WSS=M99P32-C for 2015

William A. Pate

Date 4/28/2015

William A. Pate, Technical Service Manager