



## MATERIAL PROPERTY TEST

TEST DATE(S): 21 JAN – 03 MAR 2020      TEST PROCEDURE(S): US CFR (GCD) & ASTM (various)

MATERIAL TYPE<sup>1</sup>: Expanded Polyethylene (EPE) Foam, ARPAK EPE, 43XX Series, White/Natural

TEST PERFORMED BY: MGA Laboratories, Troy, MI, USA (A2LA Cert. 850.01)  
JSP International LLC, Butler, PA (ISO Reg. 878.01)

PRODUCT TYPE: ARPAK 43XX Series      MOLDED DENSITY: 1.3 pcf (21 g/l or 44X)

<u>PROPERTY / TEST</u>	<u>(MIN) PRINT SPECIFICATION</u>	<u>SPECIMEN RESULTS *</u>	<u>TEST METHOD</u>
Density, pcf (g/l or kg/m <sup>3</sup> ) (NOMINAL ±15%), MIN	1.11 (17.8)	1.39 (22.2)	ASTM D3575
Buoyancy, g/l or kg/m <sup>3</sup> NOMINAL (±10%)	60.0	59.6	ASTM D3575 (Ref. ASTM D570)
Gasoline Immersion <sup>1</sup> %, MAX (Loss in Buoyancy)			33 CFR Part 183.114 Fuel B per ASTM D471
24 Hours	5.0	2.5	
30 Days	5.0	4.7	
Oil Immersion <sup>2</sup> %, MAX (Loss in Buoyancy)			33 CFR Part 183.114 Oil per IRM 902
24 Hours	5.0	1.2	
30 Days	5.0	2.4	
Bilge Cleaner Immersion <sup>2</sup> %, MAX (Loss in Buoyancy)			33 CFR Part 183.114 Bilge Cleaner = 5% TSP/H <sub>2</sub> O Sol.
24 Hours	5.0	0.7	
30 Days	5.0	1.5	
Gasoline Vapor Immersion <sup>3</sup> %, MAX (Loss in Buoyancy)			33 CFR Part 183.114 Fuel B (vapor) per ASTM D471
30 Days	5.0	4.6	
Flammability <sup>4</sup> Burn Rate, mm/min, MAX	100	71.0	49 CFR 571.302 (per FMVSS 302)
Water Absorption <sup>5</sup> %, MAX	10.0	4.1	ASTM D2842 (168 Hour Immersion)

Notes: <sup>1</sup>Material molded PT (w/ Pre-treat) per JSP Standard Processing Conditions.

<sup>2</sup>Tested at 23°C

<sup>3</sup>Tested at 38°C

<sup>4</sup>Sample = 355 x 100 x 12 mm

<sup>5</sup>With Molded Surface

(cont.)





(cont.)

KEY: g/l = grams per liter      kg/m<sup>3</sup> = kilograms per cubic meter      pcf = pounds per cubic foot  
% = percentage      MIN = Minimum      MAX = Maximum

\*Unless otherwise indicated, test results listed are average values from a sample size of n = 5.

This certifies that the above material at the above mentioned density and buoyancy, meets the requirements of the United States Coast Guard Floatation Specification CGD 75-168, CFR Part 183.114 (A. thru H.) for Gasoline Immersion, Oil Immersion, Bilge Cleaner Immersion, and Gasoline Vapor Immersion. The material meets the requirements of the Federal Motor Vehicle Safety Standard (FMVSS) 302.

Steven R. Sopher  
Technical Director  
JSP International LLC

06 March 2020  
Date

