

DRIVEN BY PERFORMANCE

# Monarch<sup>®</sup> 3991

Closed cell 100% EPDM foam in bun form

// ASTM D 1056 2A1

// Manufactured in buns (blocks)

// Color gray, also available in black (3091)

// Lightweight 4 lb/ft<sup>3</sup> (64 kg/m<sup>3</sup>) density expanded rubber

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 **armacell**<sup>®</sup>  
ArmaComp<sup>™</sup>

## MONARCH 3991 | Closed cell 100% EPDM foam in bun form

**Monarch 3991:** Armacell (Spencer, WV Plant) manufactures a gray, closed cell, 3 - 5 lb/ft<sup>3</sup> (48 - 80 kg/m<sup>3</sup>) density, 100% EPDM rubber product 3991, that meets the requirements of ASTM D 1056 2A1. 3991 does not incorporate a flame retardant but meets the horizontal burn / flame requirements of FMVSS 302 at thicknesses of 3/16" (0.1875") (4.76 mm) and higher. 3091 has excellent resistance to ozone and elevated temperatures. 3991 is also available in black (3091).

### TECHNICAL DATA SHEET | BUNS (effective 26FEB21)

#### POLYMER: 100% EPDM

Physical Property	Test Method	Unit	Value	
ASTM D 1056 Designation	-	-	2A1	
Cell Structure	-	-	Closed	
Color	-	-	Gray (also available in Black (3091))	
Compression Deflection 25%	ASTM D 1056	psi kPa	2 - 5 13.8 - 34.5	
Compression Deflection 25%, after Heat Aging	ASTM D 1056	%	± 30	
Compression Set (Room temp)	ASTM D 1056	%	45 max	
Density	ASTM D 1056	lb/ft <sup>3</sup> kg/m <sup>3</sup>	3 - 5 48 - 80	
Elongation	ASTM D 412 (Die A)	%	150 min	
Flammability	FMVSS 302	in mm	0.188 and higher 4.76 and higher	
Hardness, Durometer Shore 00	ASTM D 2240	-	30 - 50	
Resilience	ASTM D 2632	%	50 - 70	
Service Temperature	Low	ASTM D 1056	°F °C	-70 -56.6
	High Continuous	-	°F °C	220 104.4
	High Intermittent	-	°F °C	250 121
Tear Strength	ASTM D 624 (Die C)	lb/in kN/m	6 min 1.05 min	
Tensile Strength	ASTM D 412 (Die A)	psi kPa	40 min 276 min	
Water Absorption	ASTM D 1056	%	10 max	

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Monarch 3991 | DataSheet | 032021 | NA | EN-A

## ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With 3,200 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

For more information, please visit:

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