## DRIVEN BY PERFORMANCE

# Monarch® 4053

Closed cell Epichlorohydrin (ECH) based foam in bun form

- // ASTM D 1056 2A3 / 2C3 / 2B3
- // Manufactured in buns (blocks
- // Higher density, specialty expanded rubber
- // Oil and fuel resistant at elevated temperatures

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#### MONARCH 4053 | Closed cell Epichlorohydrin (ECH) based foam in bun form

**Monarch® 4053:** Armacell (Spencer, WV Plant) manufactures a closed cell, black 15 - 21 lb/ft³ (240 - 336 kg/m³) density, Epichlorohydrin (ECH) based rubber product 4053, that meets the physical property requirements of ASTM D 1056 2A3 / 2C3 / 2B3. 4053 has excellent resistance to heat and oils and fuels. 4053 does not incorporate a flame retardant but meets the horizontal burn / flame requirements of FMVSS 302 at 3.18 mm (0.125") (1/8") and higher.

#### TECHNICAL DATA SHEET | BUNS (effective 1/18/2023)

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Physical Property		Test Method	Unit	Value	
ASTM D 1056 Designation				2A3 / 2C3 / 2B3	
Cell Structure				Closed	
Color				Black	
Compression Deflection 25%		ASTM D 1056	psi kPa	9 - 13 62.1 - 89.6	
Compression Deflection 25%, after Heat Aging		ASTM D 1056	%	<u>+</u> 30	
Compression Set (Room temp)		ASTM D 1056	%	25 max	
Density		ASTM D 1056	lb/ft³ kg/m³	15 - 21 240 - 336	
Elongation		ASTM D 412 (Die A)	<u> </u>	175 min	
Flammability		FMVSS 302	in mm	0.125 and higher 3.18 and higher	
Fluid Immersion		ASTM D 1056	%	50 max	
Hardness, Durometer Shore 00		ASTM D 2240		50 - 70	
Resilience		ASTM D 2632	%	25 - 35	
	Low	ASTM D 1056	°F °C	-40 -40	
Service Temperature	High Continuous	_	°F °C	300 148.8	
	High Intermittent	_	°F °C	325 162.7	
Tear Strength		ASTM D 624 (Die C)	lb/in kN/m	20 min 3.5 min	
Tensile Strength		ASTM D 412 (Die A)	psi kPa	80 min 552 min	
Water Absorption		ASTM D 1056	%	5 max	

All data and technical information are based on results achieved under the specific conditions defined according to the testing standards referenced. Despite taking every precaution to ensure that said data and technical information are up to date, Armacell does not make any representation or warranty, express or implied, as to the accuracy, content or completeness of said data and technical information. Armacell also does not assume any liability towards any person resulting from the use of said data or technical information. Armacell reserves the right to revoke, modify or amend this document at any moment. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. This document does not constitute nor is part of a legal offer to sell or to contract.

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### **ABOUT ARMACELL**

As the inventor of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal 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 more than 3,300 employees and 27 production plants in 19 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for acoustic and lightweight applications, recycled PET products, next-generation aerogel technology and passive fire protection systems.

