



LAB SAMPLE TEST REPORT

AA • AAA • GMAX • HIC • PERMEABILITY • RESISTANCE TO CHEMICALS • WATER ABSORPTION



LAB SAMPLE TEST REPORT

Sample Reference	SP17XL (17 mm SPXL)	
Report Number	1043	
Report Status	Final	
Issue Date	06/12/2019	
Client Information	Brock USA 3090 Sterling Circle, Boulder, CO 80301	
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Forward

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INTRODUCTION

Sports Laboratories were commissioned to carry out lab testing on Brock SP17XL (17 mm SPXL) product samples provided by the manufacturer.

1. Test Methods

- Shock Absorption (2A) - EN 14808
- Vertical Deformation (2A) - EN 14809
- Shock Absorption (AAA) - ASTM F3189-17
- Vertical Deformation (AAA) - ASTM F3189-17
- Energy Restitution (AAA) - ASTM F3189-17
- Gmax - ASTM 1936-10
- HIC - ASTM F3146
- Water Permeability - ASTM F1551
- Resistance to Chemicals - ASTM F925
- Water Absorption - DIN 53428

2. Test Details

Sample Reference	SP17XL (17 mm SPXL)	Ambient Air Temp (F)	72
Pad Thickness (mm)	17	Reference Temp (F)	72
Test Condition	Dry	Humidity (%)	54

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3. Test Results

Characteristic	Test Method	Result		
Shock Absorption - 2A	EN 14808	64%		
Vertical Deformation - 2A	EN 14809	2.6 mm		
Shock Absorption - AAA	ASTM F3189-17	61%		
Vertical Deformation - AAA	ASTM F3189-17	7.0 mm		
Energy Restitution - AAA	ASTM F3189-17	33%		
Gmax	ASTM 1936-10	111		
HIC	ASTM F3146	0.77 meters		
Water Permeability	ASTM F1551	953 in/hr		
Resistance to Chemicals	ASTM F925	No Change		
Water Absorption	DIN 53428	1 Day	7 Days	28 Days
		3.33%	5.11%	5.45%

END OF REPORT

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