



Posey Company

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FAQ No.: FAQ 16

FAQ: Clinical testing shows similar pressure readings for Jay, Skilcare and Posey

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Objective: The purpose of the study was to measure and compare interface pressures as subjects of varying body types sat upon different wheelchair cushions.

Procedure: Three different subjects of differing ages and body types were individually seated in a standard 18" wheelchair with a pressure sensing mat placed between them and the seating surface/cushion. After a baseline pressure reading is taken with no cushion, readings were taken at predetermined time intervals (1, 3 and 5 minutes) while the subjects were seated on the test cushion. Our experience indicates that, with a motionless subject, most readings stabilized within five (5) minutes; therefore, this interval was selected for measurement. Three (3) measurements were taken on each subject for each cushion tested.

Equipment Used: The pressure measuring device used is the Verg Inc Force Sensing Array System with Regular Seat Mat. This system is owned and used clinically by UCLA's Neuro Rehab and Research Department. System calibration was completed during the recent installation and is maintained by the UCLA staff. One of the senior Physical Therapist's instructed us in the proper operation of the system, reviewed our procedure and assisted with the data interpretation.

Data Reported: Two measurement parameters are reported: average interface pressure (mmHg) and average variation coefficient (%). The equipment used measured 250 different data or focal points in a 16"x 18" surface area. The mean interface pressure that is reported represents the average value of the 250 different sensor readings. The average variation coefficient represents the standard deviation across all measurements and reflects the degree of variability in values from the 250 different sensor readings.

Conclusion: This data offers a comparison of pressure-reducing properties of various cushions under similar static conditions using the same subjects. In interpreting the data, it may be helpful to note that cushions with low average interface pressures AND low variation coefficients best reflect cushions with consistent, pressure-reducing properties across the total cushion surface area. However, it is also important to note that static interface pressures do not measure pressures achieved during activity, therefore, these measurements need to be carefully evaluated by the clinician. Finally, the selection of cushion should be based on clinical variables and the individual patient assessment, not on the results of this data.

Data on file; J.T. Posey Company; Arcadia, CA.
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	Skilcare Foam Wedge #754020	Posey Foam Wedge #6520
Variation Coefficient (%)	65	59
Mean Interface Pressures (mm Hg)	32	34

Summary

The Posey Foam Wedge Cushion tested comparably to the Skilcare Foam Wedge in terms of both interface pressure and average variation coefficient. The mean interface pressure with the Posey Wedge was 34 mmHG (versus 32 mmHG for the Skilcare Wedge). The variability between sensor readings (expressed as variation coefficient) with the Posey Wedge Cushion was less than that reported with the Skilcare cushion (59% versus 65%). This suggests greater uniformity and consistency in pressure-reducing properties across all surface areas.

	Jay J2	Skilcare Ultra 753210	Posey Gel: Fabric cvr 6519	Posey Gel StaphChek 6519SC	Posey Gel Wedge 6518W	Posey Gel Convex 6518
Variation Coefficient (%)	55.2	55.4	49.6	50.4	54.7	63.8
Ave. mean interface pressure (mm Hg)	29	28	28	30	32	30

Summary:

Posey Gel Cushions #6519SC, #6519, #6518 and #6518W show average interface pressure readings similar to the Jay J2 and Skilcare Ultra gel-foam cushions. The variation between sensor readings reported (expressed as variation coefficient) with the Posey #6519 and #6519SC was less than the variability reported with the Jay J2 or Skilcare cushions. This lesser variability suggests greater uniformity and consistency in pressure-reducing properties across all surface areas.

	Variation Coefficient (%)	Mean Interface Pressures (mmHg)
Posey Molding Foam #6522	53.4	30.3
Skilcare Foam #753230	72	29.7
Jay J2	55.2	29.0
Alimed Sit Strait T Foam #6747-01	60.5	31.3

Summary

Posey Molding Foam Cushion #6522 shows average interface pressures similar to the Jay J2, the Alimed Sit-Strait T-Foam and Skilcare Foam Cushion #753210. The variation between sensor readings reported (expressed as variation coefficient) with the Posey #6522 was less than the variability reported with the Skilcare or Alimed cushions. This lesser variability suggests greater uniformity and consistency in pressure-reducing properties across all surface areas.

	Mean Interface Pressures (mmHg)	Variation coefficient (%)
Posey Pommel #6522P	29.3	67.6
Skilcare Slide Guard #751350	30.3	65.6

Summary

Posey Pommel Cushion #6522P shows average interface pressures similar to the Skilcare Slide Guard Cushion #753210. The modest 2% variation between sensor readings reported (expressed as variation coefficient) between the Posey Pommel Cushion and the Skilcare Slide Guard would indicate similar uniformity and consistency in pressure reducing properties across all surface areas.

For complete cleaning and use instructions for all Posey products, please refer to package insert instructions accompanying each product. Copies of all package insert instructions are available on the Posey website at www.posey.com.

We hope that this answers your questions. If you have any further questions, please feel free to call Posey Customer Service at (800) 44-Posey or (800) 447-6739.