



104 Morrow Branch, Leicester, North Carolina 28748 Tel 828-683-3523 Fax 828-683-3511

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DATA SHEET

Pudgee Cushion Material

I. PRODUCT IDENTIFICATION

Trade Name: Pudgee

Manufacturing Site: Dynamic Systems, Incorporated
104 Morrow Branch
Leicester, North Carolina 28748
USA

Information Phone: 828-683-3523

Chemical Family: Soft Modified Polyurethane Open-Cell Gel-Foam.

(Designed to provide comfortable orthopedic support, conforms to body contours. This is a family of cushion materials that is extremely soft. Typical applications are as a gel-like layer seating on top of a SunMate cushion for wheelchair seat cushions, aircraft, and race car padding. It is used to provide pressure, vibration and shear relief. The texture of Pudgee is described as gel-like, bread dough, or flesh-like.)

II. PHYSICAL DATA

Density: Approximately 15 to 33 lb/ft³.

Form: White cellular foam (green pigment added for color). Small, open cell structure.

Odor: Negligible.

Vibration Absorption: This is one of the most effective vibration and sound absorbing materials available for earplugs.

Elongation (%)	187
Tensile (psi)	5.5
65 IFD (lbf) 25% Rest Indentation	34.9
65% IFD (lbf) 25% Rest Return	31.9
65 IFD (lbf) 65% Rest Indentation	111.3
65 IFD (%) Hysteresis	8.5

III. MECHANICAL STABILITY

Temperature range: This is a slow-flow, soft, elastic material which maintains its properties over a wide range of temperatures. **Normal use range:** 20°F to 130°F. **Extreme use capability:** -20°F to 200°F, depending on the specific material.

Durability: Will not deteriorate under normal storage conditions. Ultraviolet light will degrade surface. Can last for years under continuous use as a seat cushion, but sustained tension can cause tearing.

Moisture: Will not degrade in boiling water. High humidity or water will not degrade foam. A tight, open-cell structure inhibits water penetration. Pudgee absorbs and transpires moisture which helps it maintain a temperature a few degrees cooler than ambient.

IV. FIRE AND EXPOSURE DATA

Safety Precautions: Avoid contact with direct flame or temperatures in excess of 300°F.

Fire Hazard: Pudgee will not ignite from constant exposure to burning cigarettes. Decomposition outgassing occurs with extended exposure to temperatures in excess of 350°F. Extended exposure to temperatures in excess of 400°F may produce combustible gases in certain mixtures with air. Pudgee is a slow burning cushion material that requires fire retardant coatings to meet strict aircraft and government fire retardant codes.

Special Fire Fighting Instructions: Materials used for fighting wood fires are suitable; e.g., water, CO₂, sand, etc. Wear organic vapor mask to prevent inhalation of fumes.

V. HEALTH HAZARD INFORMATION

These materials are not known to cause skin irritation and are considered non-allergenic, although isolated exceptions may exist. Ingestion is neither known nor suspected to be chemically hazardous. However, mechanical blockage (of the throat) could result from trying to swallow a piece of the foam.

VI. PROTECTION INFORMATION

No special precautions are required for normal use as a seat cushion, other than might be needed to protect against soiling, fire, water or exposure to ultra violet light.

VII. DISPOSAL INFORMATION

The solid foam material is considered nontoxic and non-hazardous and may normally be disposed of as a solid landfill waste. Disposal methods need to be in compliance with federal, state and local laws and regulations.

VIII. SHIPPING

Neither regulated nor restricted as a hazardous material by the U.S. Department of Transportation (DOT).