

PYRATHANE[®] 83ASD

(Static Dissipative)

This material is a more specialized version of our PYRATHANE products family and therefore a modest upcharge is associated with it.

Please see our product brochure for information regarding our standard products.

PYRATHANE 83ASD is a polyester-based polyurethane which is identical in appearance to our 83A PYRATHANE. 83ASD is formulated to provide clean, permanent ESD (electrostatic discharge) protection and is humidity insensitive making it applicable for electronic component handling and other static intolerant applications.

Belts of both flat and round cross sections can be manufactured of the 83ASD material.

As the modulus of PYRATHANE 83ASD is slightly lower than our 83A material, we would recommend an initial stretch of approximately 12-1/2% which is somewhat higher in order to compensate.

This higher initial stretch will provide approximately the same tension as our 83A material at 10%.

PROPERTIES AND CHARACTERISTICS OF PYRATHANE 83ASD (approximate)

SHORE HARDNESS

"A" Scale 82 +/- 3
ASTM D 2240

ULTIMATE TENSILE STRENGTH

PSI 4,300
ASTM D 412

ULTIMATE ELONGATION

% 670
ASTM D 412

TENSILE STRESS

PSI @100% ELONGATION 740
PSI @300% ELONGATION 1,160
ASTM D 412

TEAR STRENGTH

Die "C" lbf/in 370
ASTM D 646

RESISTIVITY

Surface 1.0×10^{11} ohms/square
Volume 2.0×10^{10} ohms-cm
ASTM D-257

STATIC DECAY RATE 12% R.H.

+5000 V to 50 V 0.9 seconds
-5000 V to -50 V 0.9 seconds
FTMS-101C

AMBIENT OPERATING TEMP -10° to +150° F

To assist in your considerations of this material, we believe the following comparisons to our standard 83A PYRATHANE might be helpful.

ADVANTAGES

- Permanently static dissipative (Independent of humidity level)
- Ultra-Clean: Low off-gassing, low contamination

DISADVANTAGES

- Slightly lower modulus
- Slightly lower Tensile strength

This data is provided for general information and material comparison. The potential user should perform tests to determine the product's performance and suitability in the intended application. Final determination of the fitness of the product for any particular use is the responsibility of the buyer.