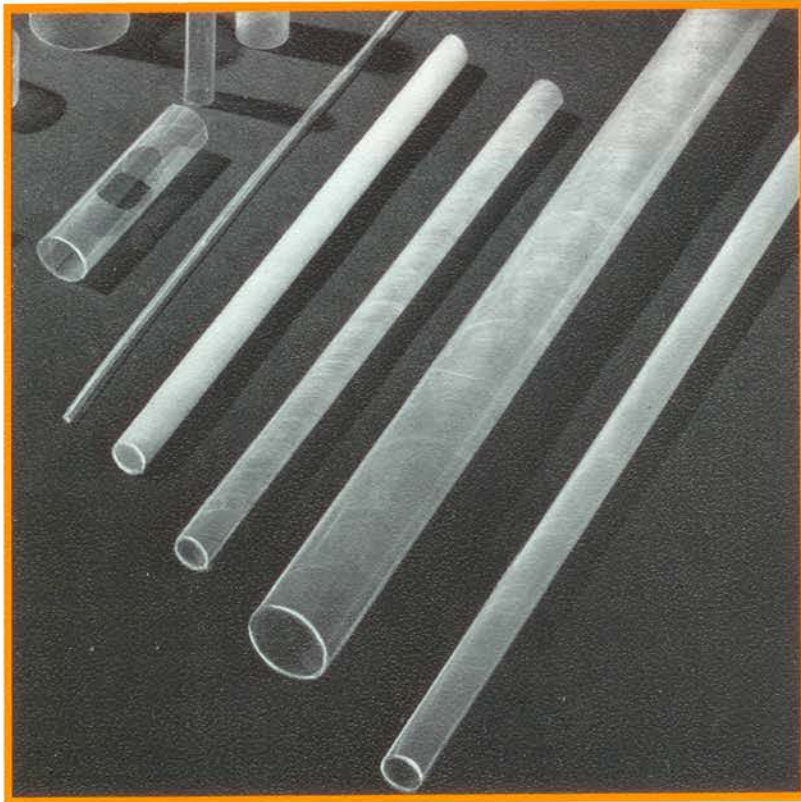


# Thermoflex-1000 "Kapton" Insulating Tubing



# Thermoform-1000 (Kapton™) Insulating Tubing

## Product Features

- Extremely high dielectric strength—7,000 VPM
- Extremely wide temperature usage, from -269 to +400°C.
- Extremely strong...very high tear resistance

"Kapton" polyimide film is an extremely strong, transparent (amber) film that retains its high dielectric strength over a very wide range of temperatures. It remains flexible at liquid helium temperature (-269°C) and does not lose its strength until it reaches a temperature of 815°C. (Properties for Kapton tubing are in a lower range as the sealing agent used to produce Thermoform-1000 tubing limits its high temperature usage.) Thermoform-1000 ("Kapton") tubing is flame resistant and begins to char only above 800°C. It does not melt and is self-extinguishing. It has excellent mechanical properties and is practically unaffected by moisture. There is no known organic solvent for "Kapton".

Suggested uses include coil forms, capacitor and resistor covers, spacers, bobbins, slip-on wire insulation...any application where a wide temperature range needs to be coupled with very high dielectric and mechanical strengths. "Kapton" can be combined with other materials to provide tubes that have the excellent properties listed below coupled with the rigidity and lower cost of other materials.

\* Note: The properties listed herein are based on the material manufacturer's experimental data and should not be taken as design specifications or design data. They are listed only as a general guide to your own experimentation, and the user should thoroughly test out any projected application. Precision Paper Tube Company makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information.

## PROPERTIES\*

Temperature Range	-269 to +400° C.
Dielectric Strength	7,000 VPM @ 23° C.   2,500 VPM @ 400° C.
Volume Resistivity	1 x 10 <sup>16</sup> ohm/m (ASTM D-257-78)
Moisture Absorption	1.3% (@ 23° C., 50% RH)
Flammability	Self-Extinguishing , 94 VTM-O

Data based on 1 mil film thickness. See note at right.



# Precision

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