



**CK125-TU**  
**Material Data Sheet**  
Revision: 2/27/14

**Item:**  
**Thermally Upgraded Extensible Kraft**

**Description:**

CK125-TU insulating papers are manufactured under an extensible paper process that provides this material with approximately 15% elongation. This unusual elongation permits CK125 to stretch and absorb energy when subjected to extreme stress. The extensible paper process is entirely mechanical and in no way affects the high purity or chemical properties.

Meets the requirements of IEEE C 57.100, IEC 554-3-5 and IEC 554-3-3.

**Typical Test Values:**

	Test Method	.002" (.051mm)	.0025" (.064mm)	.003" (.076mm)	.005" (.127mm)
Thickness	IEC60554-2.5.2	+/- 7%	+/- 7%	+/- 7%	+/- 7%
Density	IEC60554-.2.7	1.15 g/cc	1.15 g/cc	1.15 g/cc	1.15 g/cc
Range		1.05-1.25 g/cc	1.05-1.25 g/cc	1.05-1.25 g/cc	1.05-1.25 g/cc
Basis Weight	IEC60554-2.6	52.4 g/m <sup>2</sup>	65.5 g/m <sup>2</sup>	78.58 g/m <sup>2</sup>	163.47 g/m <sup>2</sup>
Basis Weight		32 lbs/ 3000sf.	40 lbs/ 3000sf.	48 lbs/ 3000sf.	79 lbs/ 3000sf.
Elongation: MD	IEC60554-2.8	12-20%	12-20%	12-20%	12-20%
Elongation MD Typical		15%	15%	15%	15%
Tensile: MD 1" width	IEC60554-2.8	25-36 lbs	30-41 lbs	40-59 lbs	65-85 lbs
Tensile: MD "Nominal"		32 lbs/1" 56.02 N/cm	34 lbs/1" 59.54 N/cm	40 lbs/1" 70.05 N/cm	50 lbs/1" 87.56 N/cm
Tensile Index	IEC60554-2.8	127.08 Nm/g	120.79 Nm/g	118.24 Nm/g	95.09 Nm/g
Dielectric in air	IEC60554-2.24	400 V/mil	400 V/mil	400 V/mil	400 V/mil
Dielectric in air	IEC60554-2.24	15.74kv/mm	15.74kv/mm	15.74kv/mm	15.74kv/mm
Dielectric in oil	ASTM D149	2.05 kV/mil 80.71 kV/mm	1.84 kV/mil 72.44 kV/mm	1.85 kV/mil 72.83 kV/mm	2.02 kV/mil 79.53 kV/mm
Impulse	ASTM D3426	3.0 kV/mil	2.9 kV/mil	2.9 kV/mil	2.3 kV/mil
Burst	IEC60554-2.11	53 PSIG 345 kPa	67 PSIG 437 kPa	80 PSIG 552 kPa	149 PSIG 1029kPa
Elmendorf Tear CD	IEC60554-2.9	135gf	155gf	175gf	200gf
Finch Edge Tear 5/8"	IEC60554-2.10	18 lbs	23 lbs	30 lbs	48bs
T.E.A.	ASTM D202	30 lbs-ft/ft <sup>2</sup>	38 lbs-ft/ft <sup>2</sup>	52 lbs-ft/ft <sup>2</sup>	74 lbs-ft/ft <sup>2</sup>
Nitrogen Content	ASTM D982	2 - 4%	2 - 4%	2 - 4%	2 - 4%
Ash Content	IEC60554-2.14	.22%	.22%	.22%	.22%
Moisture Content	IEC60554-2.13	4 - 7%	4 - 7%	4 - 7%	4 - 7%