

DTM NMN(6640) Polyester Film & NOMEX[®] Amide Fiber Paper Composites

DTM NMN(6640) Polyester Film & NOMEX[®] Amide Fiber Paper Composites are a family of 3-ply laminates of NOMEX[®] amide paper bonded to both sides of polyester film. It has not only the excellent dielectric and mechanical strength of film's, but the better tear resistance and excellent adsorption to varnish of paper's, so it is a reliable kind of F,H-class insulation material for electrical machines.

Characteristics:

- *Excellent dielectric and good mechanical strength.
- *Good heat resistance, can work for a long term under 180°C for F, H-class insulation.
- *Better flexibility and very good applicability in slot insulation.
- *Low dielectric dissipation, can work in harsh conditions.

Specification:

Type		NMN-20	NMN-25	NMN-30	NMN-35	NMN-45	NMN-52
Typical thickness	mm	0.20	0.25	0.30	0.35	0.45	0.52
Thickness tolerance	mm	±0.02	±0.02	±0.03	±0.03	±0.04	±0.05
Basic Weight	g/m ²	10	290	360	470	610	650
NOMEX [®] paper thickness	mm	0.05	0.05	0.05	0.05	0.05	0.08
Polyester Film thickness	mm	0.075	0.125	0.175	0.25	0.35	0.35

* Other thickness and size are available on customers' demand.



Properties:(According to JB/T4061.1-1995)

Property items	Test methods	Units	Typical Value					
			NMN-20	NMN-25	NMN-30	NMN-35	NMN-45	NMN-52
1. Visual			The surface should be even and free from wrinkle, blister and impurity					
2. Breakdown voltage	A	k	≥ 11	≥ 13	≥ 15	≥ 20	≥ 25	≥ 25
	After Bending	V	≥ 9	≥ 12	≥ 13	≥ 18	≥ 23	≥ 23
3. Tensile strength	M.D.	N/ cm	≥ 180	≥ 220	≥ 270	≥ 320	≥ 350	≥ 350
	MD after bending		≥ 130	≥ 180	≥ 200	≥ 250	≥ 280	≥ 280
	C.D.		≥ 130	≥ 180	≥ 200	≥ 250	≥ 280	≥ 280
	CD after bending		≥ 110	≥ 150	≥ 170	≥ 200	≥ 200	≥ 200
4. Elongation	M.D.	%	≥ 12	≥ 12	≥ 12	≥ 12	≥ 12	≥ 12
	C.D.		≥ 18	≥ 18	≥ 18	≥ 18	≥ 18	≥ 18
5. Adhesion	A	---	No delamination.					
	180±2℃ /10min	---	No delamination, no bladder, no gel					

Packing & storage:

Packed in carton after sealed by plastic film, keep in dry environment at room temperature, keep from fire and humidity, shelf life 12 months.

Application:

NMN is not only suitable for the slot insulation of class-F motors and generators, but layer, barrier and ground insulation of dry transformers.