Red insulation paper materials

Red insulation paper is a soft composite material made of polyester film coated with adhesive and a two-layer insulation paper made of wood pulp insulation paper on one side.

Insulation level: Class B; Temperature resistance: 130 ℃.

Appearance: The surface is uniform, free from burrs, bubbles, wrinkles, and defects

Usage: Red Kuaiba paper combines the excellent insulation performance of wood pulp insulation paper and the good dielectric strength of polyester film, widely used in electrical equipment, suitable for slot to slot insulation, turn to turn insulation, and pad insulation of B-class motors.

Characteristics of Red Quick Bus Paper Products

Red fast paper has insulation and anti-interference effects, high electrical insulation, mechanical strength, softness, and elasticity; Red fast paper is particularly resistant to acid and alkali corrosion, tear and wear resistance, insensitive to moisture, non-toxic and flame resistant. Red fast paper has strong inherent dielectric strength, mechanical toughness, flexibility and resilience, and good thermal stability.

Factors Influencing the Performance of Red Quick Bus Paper

1. Insulation resistance and resistivity: The smaller the conductivity of a material, the greater its resistance, and the reciprocal relationship between the two. For red fast paper insulation materials, it is always hoped that the resistivity is as high as possible.

2. The relative dielectric constant and the tangent of the dielectric loss angle.

3. Breakdown voltage and electrical strength: Under a strong electric field, the insulation material of red fast bar paper undergoes damage, loses its insulation performance, and becomes conductive, which is called breakdown. The voltage at breakdown is called the breakdown voltage (dielectric strength). Electrical strength is the quotient of the voltage at which breakdown occurs under specified conditions and the distance between the two electrodes subjected to applied voltage, which is the breakdown voltage per unit thickness. For red fast paper insulation materials, the higher the breakdown voltage and electrical strength, the better.

4. Tensile strength: refers to the maximum tensile stress that a specimen can withstand in a tensile test. It is the most widely used and representative test for the mechanical properties of red fast paper insulation materials.

5. Flammability: Refers to the ability of red fast paper insulation materials to resist combustion when in contact with flames or to prevent further combustion when leaving flames. With the increasing application of red fast paper insulation materials, the requirements for their flammability become more important. People use various means to improve and enhance the flammability of red fast paper insulation materials. The higher the flammability, the better its safety.

6. Arc resistance: Under specified test conditions, the ability of red fast paper insulation material to withstand the arc action along its surface. During the test, AC high voltage small current is used to determine the arc resistance of the insulation material by the time required to form a conductive layer on the surface of the red fast paper insulation material through the arc action generated between the two electrodes under high voltage; The larger the time value, the better its arc resistance.

NO	Properties	Unit	Values								
1	Nominal thickness	mm	0.1	0.125	0.15	0.18	0.20	0.25	0.30	0.40	0.50
2	Thickness allowed tolerance	mm	±0.02	±0.02	±0.02	±0.02	±0.03	±0.03	±0.03	±0.03	±0.03
3	Nominal grammage	g/m2	120	138	155	180	210	255	300	450	550
4	Tensile strength（MD）	N/10 mm	≥100	≥100	≥100	≥110	≥120	≥120	≥200	≥200	≥200
5	Tensile strength（XD）	N/10 mm	≥70	≥70	≥70	≥75	≥80	≥95	≥105	≥105	≥105
6	Elongation（MD）	%	≥2	≥2	≥2	≥2	≥2	≥2	≥2	≥2	≥2
7	Elongation（XD）	%	≥8	≥8	≥8	≥8	≥8	≥8	≥8	≥8	≥8
8	Electric breakdown voltage	KV	≥3.5	≥3.5	≥3.5	≥3.5	≥3.5	≥4.5	≥5	≥5	≥5
9	Appearance	No delamination, no blister, no adhesive flow									