













Experts in electrical Insulation materials

# **ELECTRICAL INSULATION MATERIALS**



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HENAN YAAN ELECTRICAL INSULATION MATERIAL PLANT CO.,LTD

# **COMPANY PROFILE**











Henan YAAN Electrical Insulation Plant Co., Ltd., was founded in 1986, specializing in manufacturing electrical insulation materials with 8 production lines and the production capacity is 10000 tons annually.

Yaan is strict with quality control, continuous improvement to high-quality of electrical insulation products including insulation paper, insulation varnish, insulation film, insulation board, insulation tape, varnished glass cloth, fiberglass sleeving and mica products etc.

The insulation materials products are accredited by UL (UL File Number E310670), and have passed RoHS and Reach testing. YAAN acquired ISO9001 quality management certification. With excellent performance and good reputation, YAAN exports to over 130 countries and regions and has established long-term stable cooperation with many enterprises.

In order to supply to customers highest quality products, YAAN has established seven comprehensive guarantee systems such as mature supply system, key parameter production process system, warehousing system, packaging system, quality control system, pre-shipment inspection system and after-sales service system.

We are unremitting, depending on the advanced technology, diversified products and professional service, YAAN is on the way to a global supplier and leading the future development of electrical insulation material industry.

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# **Insulation Composite Materials**

#### DMD

Insulation class: B/F (130/155 °C)

Description: DMD is a three-layer flexible composite material, produced by using adhesive to adhere the two sides of non-woven polyester fabric with polyester film.

It has high dielectric properties, tear strength and tensile strength, good impregnation performance.

Application: DMD is used for motors, generators and electric appliances in the slot insulation, liner insulation and turn to turn insulation.



#### NMN

Insulation class: F/H (155/180 °C)

Description:NMN is a three-layer flexible composite material, produced by using F Class adhesive to adhere the polyester film with hot rolling DuPont NOMEX paper on both sides.

It has excellent heat-resistant, electrical, mechanical and impregnating properties.

Application:NMN can be used for slot insulation of F Class electric motor,general H Class electric motor and insulation treatment of transformer.



#### AMA

Insulation class: F (155 °C)

Description: AMA is a three-layer flexible composite material, produced by using F Class adhesive to adhere the polyester film with Aramid paper on both sides.

The AMA has excellent heat-resistant, electrical, and mechanical properties. It is totally according with the standard of NMN (GB/T5591.3-2008), and it has the very similar property as NMN. It's perfect substitute of NMN.



Application: AMA is suitable for slot-to-slot insulation, phase-to-phase and turn-to-turn insulation of F-class motors, and can be used as interlayer insulation for transformers and other electrical appliance.

# **Insulation Composite Materials**

#### **GHG**

Insulation class:H (180 °C)

Description:GHG is a three-layer flexible composite material, produced by using H-class adhesive to adhere the two sides of polyimide film with alkali-free glass cloth.

It is with good physical mechanical property, dielectric property, soft and tear resistant, heat property and fire resistance property.

Application: GHG can be used for the insulation treatment of H Class electric motor and transformer.



#### NHN

Insulation class: H (180 °C)

Description:NHN is a three-layer flexible composite material, produced by using H-class adhesive to adhere the polyimide film with hot rolling DuPont NOMEX paper on both sides.

NHN is one of the most exclusive electric insulation materials at present. It has excellent heat-resistant, dielectric property, and superior mechanical properties.





Application: NHN can be used for slot insulation of H class motors and electrical appliances, inter-turn insulation, gasket insulation, and interlayer insulation of dry-type transformers.

#### AHA

Insulation class: H (180 °C)

Description: The AHA is a three-layer flexible composite material, made by the polyimide film with hot rolling Aramid paper on both sides. The AHA is one of the most exclusive electric insulation materials at present. It has excellent heat-resistant, dielectric property, and superior mechanical properties.

AHA is totally according with the standard of NHN (GB/T5591.3-2008), and it has the very similar property with NHN, it's a perfect substitute of NHN.

NHN.

Application: AHA is suitable for slot, liner, phase, and turn-to-turn insulation in H-class electrical motors. It can be used as inter-layer insulation in high voltage transformers and other electrical appliances.















# **Insulation Composite Materials**

#### HGH

Insulation class: H (180°C)

Description: HGH is a three-layer flexible composite material, produced by H-class adhesive to adhere the two sides of alkali-free glass cloth with polyimide film.

Excellent dielectric properties, mechanical strength, tearing strength and stable performance at low and high temperature condition.

Application: HGH is used as slot insulation, liner insulation, interlayer insulation of motor, transformer or other electrical appliances.



#### MGM

Insulation class: F (155°C)

Description:MGM is a three-layer flexible composite material, produced by F-class adhesive to adhere the two sides of alkali-free glassfiber cloth with polyester film.

Be with excellet mechanical strength ,great electrical properties and good flexibility.

Application: MGM is used as slot insulation, liner insulation, interlayer insulation of motor, transformer or other electrical appliances.



#### **PMP**

Insulation class: B (130 °C)

Description: PMP is a three-layer flexible composite material, produced by adhesive to adhere the two sides of Polyester film with Capacitor paper.

Application: PMP can be used for wrapping insulation of electric device and automatic inserting winding slot insulation of small size electric motor.



## Fish Paper

Insulation class:E (120 °C)

Description: Fish paper is a two-layer flexible composite material, produced by B Class adhesive to adhere insulation paper with polyester film together.

Application: It is used as slot, phase, turn-to-turn and liner insulation in Class E/B motor and electrical appliances.





# **Insulation Varnish**

Dry type:Air dry / Heating dry

Insulation class:B/F/H (130 °C/155 °C/180 °C)

#### Features:

- 1.Good dielectric properties. The dielectric constant, breakdown strength and volume resistance are stable at high and low temperatures (-50 to 250  $^{\circ}$  C), and be with wide frequency range.
- 2. Cold resistance, acid & alkali resistance, radiation resistance, and oxidation resistance.
- 3.It has excellent mechanical and moisture-proof properties, fast curing at low temperature, good bonding strength and stable storage.

Application: The insulation varnish is used for impregnating motors, transformers and electrical winding.











#### Models

YA305 Modified alkyd quick-drying insulation impregnating varnish	Insulation class: B (130 °C)
YA1032 Environmental protection melamine impregnated varnish	Insulation class: B (130 °C)
YA1038 Amino alkyd quick-drying insulating impregnating varnish	Insulation class: B (130 °C)
YA1040 Phenolic modified polyester impregnating varnish	Insulation class: F (155 °C)
YA1053 Silicone impregnating varnish	Insulation class: H (180 °C)
YA1054 Polyester modified silicone insulation impregnating varnish	Insulation class: H (180 °C)















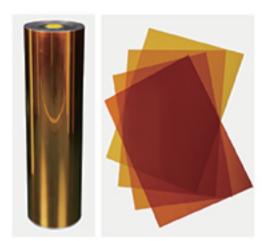
# Insulation Film

### Polyimide Film

Insulation class: H (180°C)

Description: Polyimide film is with high insulation performance, high temperature resistance, good radiation resistance and excellent dielectric properties.

Application: Polyimide film is used for H-class motor and electrical insulation.



### Polyester Film

Insulation class: :E (120°C)

Description: Polyester Film is made from Polyethylene terephthalate by casting & Biaxially oriented.

Application:Polyester film is widely used for the end wrap insulation, liner insulation of electrical oils, electromagnetic wire wrap insulation, cable wrapping on motor, transformer or other electrical appliances. It also be used for packaging, glass-steel, collar of clothes, etc.



#### Diamond Dotted Polyester Film

Insulation class: E (120°C)

Description: It is also known as DPF. It is produced by coating modified epoxy resin in diamond dot patterns on electrical insulating film. The size of the dots are carefully designed and arranged to cover only 36% of the surface, remaining 64% free for optimum SF6 gas distribution.

#### Application:

- Dry-type transformer layer insulation
- 2. Oil filled transformer layer insulation
- 3. Suitable for Automobile, Electronic application
- 4. Motor slot insulation, phase insulation film
- SF6 high current voltage transformer wire winding insulation or layerinsulation film.

#### Pressboard

Insulation class: class A (105 °C)

**Insulation Paper** 

Description:Pressboard is made from 100% superior sulfate insulating wood pulp. High chemical purity, excellent enlonation, good Mechanical and dielectric Strength.

Application: Pressboard is used for oil-immersed transformers, capacitors, reactors and switches.



# Insulation Crepe Paper

Width: 20、25、30、35、40mm

Description: Crepe paper is made of insulating kraft paper with creping. It has very good oil-soluble properties, stable electrochemical index and high physical strength.

Especially as lead parts of the insulation package, thereby improving the electrical insulation and mechanical properties of the product structure.

Application:Insulation Crepe Paper is used as interturn insulation for coils of oil-immersed transformers and interlayer insulation of distribution transformers.





### **Diamond Dotted Insulation Paper**

Insulation class: F (155 °C)

Description: Made of electrical insulation paper with diamond shape epoxy resin dotted in both sides.

Good dialectric and mechnical properties after being heat-solidafication.

Application:DDP is used as interturn insulation for coils of oil-immersed transformers and interlayer insulation of distribution transformers.

















# **Insulation Sleeving**

#### PVC coated fiberglass sleeve

Model: 2715 Insulation class: A (105 °C) Voltage: 1.5kv, 2.5kv, 4kv Inside diameter: 1-35mm

Line color: Blue, green ,pink.

Application: It is suitable for wiring insulation and mechanical protection of motors, electrical appliances, instruments, radios, etc.



## Acrylic coated fiberglass sleeve

Model: 2740 Insulation class: F (155 °C)
Voltage: 1.5kv,4kv. Inside diameter: 1-35mm

Color: Red, white, black,etc

Application: It can be used for wiring insulation and mechanical protection for motors, appliances, meters, radios, etc



### Silicone rubber fiberglass sleeve

Model: 2751 Insulation class: H (180 °C)
Voltage:4kv Inside diameter: 1-35mm

Color: Red, yellow, white, black,etc

Application: It can be used for wiring and mechanical protection of higher requirements motors and appliances.



#### Silicone resin fiberglass self-extinguish sleeve

Model: 2753 Insulation class: H (180 °C) Voltage: 1.5kv, 2.5kv, 4kv, 7kv Inside diameter: 1-24mm

Color: Blue, green, white, black, red, etc.

Application: It can be used for insulation protection of H-class motor insulation, household appliances, televisions and electronic instruments.



# **Insulation Tape**

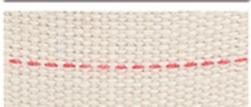
#### Cotton tape

Insulation class::H (180°C)

Description: Cotton tape is made of pure cotton fiber. Using high-quality cotton plied yarn as raw material, Good impregnation effect and high strength.

Application: Cotton tape is used as insulating binding materials for electric motors, coil of transformers.





### Polyester Shrinking Tape

Insulation class: F (155°C)

Description:Polyester shrinking tape is made from a special compound fiber of thermal contraction. After binding and dried at 105°C for 10 minutes, it will be shrunk to 70%, which is good at a solid binding and at a compatibility with transformers. In this way, it will be utilized in the transformer oil at 105 °C for a long time.



Application: Polyester Shrinking Tape is suitable for the binding and fastening of product line packages and other components of motors, transformers, reactors, etc. The workpiece treated by the product can save the amount of impregnating paint, and the appearance is standardized and the overall integrity is good.

#### Non-alkali fiberglass tape

Insulation class: C (200°C)

Description: Fiberglass tape is made of the non-alkali glass fiberyams. The main component is E-glass, oxidation potassium, oxidation sodium, of which the content of oxidation of alkali metals is no more than 0.5.

Application: Non-alkali fiberglass tape can be used as wrapping and banding material for transformers, electric motors and cables.













# COMPANY HONORS & QUALIFICATIONS



















































