

OUR PRODUCTS

Other Products



Cable Sleeving **Rigid Laminates Flexible Laminates Resin Rich Tape Adhesive Tapes Woven Tapes Specialised Tapes** 13 **Varnish & Thinners Transformer Insulation 17** 16 **Cleaning Solvents** 20 19 **Thermal Insulation & Tubing**

ABOUT US

Insumat (Pty) Ltd specialises in supplying conductor, varnish and insulating materials used by the local armature winders and transformer companies.

Insumat is backed by over 30 years of experience selling conductor and insulating materials for various types of rotating machines.



All materials supplied by Insumat will be backed with a full specification sheet and MSDS where applicable. These specification sheets are available on request. Products sourced from overseas will have the necessary IEC, UL, ASTM or BS certification.



Through the 30 years of trading in this industry, Insumat has achieved extensive product knowledge and what materials to offer clients for best results. Insumat will procure materials locally where possible and support the countries drive to promote "local content and manufacture". Other specialised materials will be imported from reputable manufacturers around the world.







SLEEVING



ACRYLIC SLEEVING

- Class F 155°C
- BDV 2.5kV and 4kV available
- Sold per meter from 0.5 20mm in diameter
- Standard colour yellow/black





SILICONE SLEEVING

- Class H 180°C
- BDV 4kV & 7kV
- Sold per meter from 0.5 25mm in diameter
- Standard colour red/black

HTG NON FRAY SLEEVING

- Temperature withstanding 600°C
- BDV 600 volts
- Sold per meter from 1.0 12mm
- Standard colour natural



CABLE



NOMEX CABLE

- Class F 155°C
- BDV 800 volts
- Sold per meter from 0.5 95mm
- Standard colour red & white/black
 & white from 25mm and up





SILICONE CABLE

- Class H 180°C
- BDV 350/500 volts 0.5 6.0mm &
 600 volts 10mm and up
- Sold per meter from 0.5 70mm
- Standard colour red/black/blue/white/grey/brown

POLYBRAID CABLE

- Class H 180°C
- BDV stock 1.5kV and 13.8kV available
- Sold per meter from 2.5 150mm on 1.5kV
- Sold per meter from 25 95mm on 13.8kV
- Standard colour 1.5kV is yellow/orange & 13.8kV is black



FLEXIBLE LAMINATES



NOMEX POLYESTER NOMEX (NPN)

- Class H 180°C
- BDV (8kV/0.15mm)(14kV/0.23mm)
 (18kV/0.28mm)(19kV/0.35mm)
- Sold per meter & available in 0.15/0.2/0.23/0.28/0.35/0.41mm
- Standard colour white with orange/yellow/green line



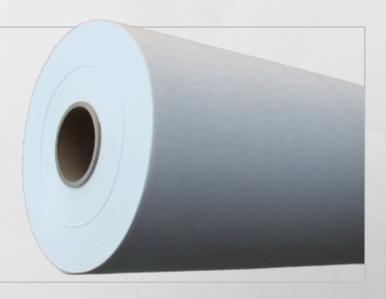


DACRON MYLAR DACRON (DMD)

- Class F -155°C
- BDV (7kV/0.16mm)(11kV/0.23mm) (16kV/0.28mm)(19kV/0.35mm)
- Sold per meter & available in 0.16/0.23/0.28/0.35mm
- Standard colour white/blue/pink

PHASE INSULATION

- Class F 155°C
- BDV 6kV
- Sold per meter & available in 0.28/0.29mm
- Standard colour white



FLEXIBLE LAMINATES



POLYESTER FILM

- Class E 120°C
- BDV 20kV per mm
- Sold per kilogram & available in 0.025/0.036/0.05/0.075/0.1/0.125 0.2/0.25/0.35mm
- Standard colours milky white/clear





NOMEX MICA NOMEX

- Class F 155°C
- BDV varies by thickness
- Sold per sheet 900x900mm & available in 0.38/0.6/0.76mm thickness

NOMEX 410

- Class C (220 Degrees)
- BDV 18-32kV
- Sold per kg
- Available in 0.25/0.38/0.5mm
- Standard colour white



RIGID LAMINATES



GLASS POLYESTER (GP03)

- Class F 155°C
- BDV 12kV per mm
- Sold per sheet 2040x1020mm & available in 0.8/1.6/3/5mm
- Standard colour off red



EPOXY GLASS (G11)

- Class F 160°C / Class H 180°C
- Sold per sheet 2040x1020mm & available in 0.8/1.5/3/4/5/6mm
- Standard colour green

VULCANIZED RED FIBRE

- Class B 130°C
- Sold per sheet in a 0.8/1.6/3mm x1100x1000mm
- Used for wedging on small mush wounds
- The red fibre can also handle high voltage and offers 4kV per mm



RIGID LAMINATES



SILICONE GLASS

- Class C 200°C
- BDV varies by thickness
- Sold per sheet & available in 0.8/1.6mm
- Standard colour tan





HOT MOULDING MICA (SHELLAC)

- Class F 155°C
- BDV varies by thickness
- Sold per sheet 980x780mm in 0.25/0.76mm
- Standard colour brown

COMMUTATOR MICA (SEGMENT MICA)

- Standard 0.8/1.0/1.2mm x 980x780mm sheets.
- Used to manufacture and repair commutators on DC machines.
- The mica can be punched or machined and used for segment mica and is mechanically very strong.



RESIN RICH TAPES



BANDING TAPE (RESI-BINDER)

- Class H
- Sold per roll in a 200m and 1500m
- Standard colour white





RESIN RICH MICA TAPE

- Class F 155°C
- Sold per roll (0.2mmx50mmx25m)
- Standard colour clear

ADHESIVE TAPES



ADHESIVE KAPTON TAPE

- Class H 180°C
- BDV 6kV
- Sold per roll in 0.065x9.5/12/19/25mm widths
- Standard colour copper





ADHESIVE GLASS TAPE (GL95)

- Class B 130°C
- BDV 2.5kV
- Sold per 50m roll in 18/24mm widths
- Standard colour white

YELLOW ADHESIVE POLYESTER TAPE

- Class B 130°C
- BDV 4.5kV
- Sold per 50m roll in 6/9/12/15/18/24mm widths
- Standard colour yellow



ADHESIVE TAPES



CLEAR ADHESIVE POLYESTER TAPE

- Class B 130°C
- BDV 4.5kV
- Sold per 50m roll in 12/18mm widths
- Standard colour clear





FILAMENT TAPE

- Service temperature 80°C
- Sold per roll in 18/24/48mm widths
- Standard colour clear with glass strands

MASKING TAPE

- Service temperature 80°C
- Sold per roll in 18/24/48mm widths
- · Standard colour yellow





OIL RESISTANT FILAMENT TAPE

- Class F 155°C
- BDV 5kV and 7kV available
- Sold per roll in 12/18/24mm widths
- Standard colour clear with glass strands

WOVEN TAPES



POLYESTER DYNAMO TAPE

- Class A 105°C
- Sold per 50m roll in 12/19/25/35mm widths
- Standard colour white with red tracer line





POLYESTER WEBBING TAPE

- Class A 105°C
- Sold per 25m roll in 19/25/35mm widths
- Standard colour white

GLASS TAPE

- Class C 200°C
- Sold per 50m roll in 12/19/25mm widths
- Standard colour white with tracer line
- 0.09mm thick blue tracer line
- 0.13mm thick red tracer line
- 0.18mm thick orange tracer line



WOVEN TAPES



TYING STRING

- Sold per roll in 4 & 8 strand
- 4 strand 1000m roll
- 8 strand 500/1000m roll
- Standard colour white



POLYTWILL TAPE

• Manufactured with a herringbone twill weave which ensures the tape is mechanically much stronger than the typical box weave.



- Class C 200°C
- Provides excellent absorption qualities, shielding and armouring.

SPECIALISED TAPES



POLYESTER BACKED MICA TAPE

- Class F 155°C
- BDV 4.5kV
- Sold per 0.13mmx25mmx50m roll on a 55mm core
- Standard colour silver



GLASS BACKED MICA TAPE

- Class F 155°C
- BDV 2kV
- Sold per 0.15mmx25mmx50m roll on a 55mm core
- Standard colour silver

POLYESTER GLASS MICA POLYESTER (PGMP)

- Class F 155°C
- BDV 4.5kV
- Sold per 0.17mmx25mmx50m roll on a 55mm core
- Standard colour silver



SPECIALISED TAPES



SEALING TAPE

- Class F 155°C
- Sold per roll 0.075mmx25mmx50m on a 40mm core
- Standard colour red





CONDUCTIVE TAPE

- Class F 155°C
- Used in VPI/Resin Rich & Anhydride Systems
- Sold per roll 0.09mmx25mmx50m on a 40mm core
- Standard colour black

SEMI-CONDUCTIVE TAPE

- Class F 155°C
- Used in VPI/Resin Rich & Anhydride Systems
- Sold per roll 0.2mmx25mmx50m on a 40mm core
- Standard colour grey



SPECIALISED TAPES



NON-ADHESIVE KAPTON TAPE

- Class H 180°C
- BDV 100HN 7kV

200HN - 6kV

300HN - 5kV

- Sold in 12mm rolls
- Standard colour copper



SEL - C - B - Sc - St

SELF-FUSING RUBBER TAPE

- Class H 180°C
- BDV 20kV per mm
- Sold in 0.5x25mm rolls
- Standard colour red

VARNISH & THINNERS



AIR DRYING VARNISH

- Class F 155°C
- Sold per 5L tin
- Standard colour clear/white/red
- Imported grade





ISONEL 31 SA VARNISH

- Class H 180°C
- Sold per 5/20/200L
- Standard colour clear
- Imported grade

XYLENE THINNERS

• Sold per 5/20/200L



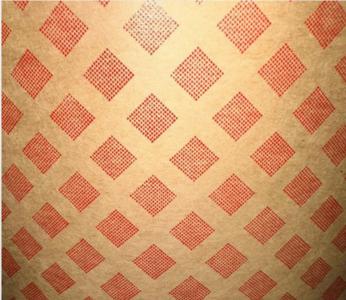
TRANSFORMER INSULATION (=



CREPE PAPER TUBES

- Class A 105°C
- BDV Dependent on wall thickness
- Sizes available
 5x7/6x8/8x12/10x12/10x16/12x14
 17x21/25x29 in 1000mm lengths.





DIAMOND DOTTED PAPER

- Class A 105°C
- BDV Dependent on thickness
- Sizes available
 0.13mm/0.25mm/0.38mm in
 1000mm lengths

INSULATION KRAFT PAPER

- Class A 105°C
- BDV 9kV
- Sold per kg & available in 0.25/0.38/0.5/0.8mm.



TRANSFORMER INSULATION (=



LD TRANSFORMER BOARD

- Class A 105°C
- BDV 12-14kV per mm in air
- Available in sheets of
 - 1.0 x 2000x1000mm
 - 2.0 x 2000x1000mm
 - 3.0 x 2000x1000mm



- Class A 105°C
- BDV 12kV per mm in air
- · Available in sheets of
 - 1.0 x 2000x1000mm
 - 1.5 x 2000x1000mm
 - 2.0 x 2000x1000mm
 - 3.0 x 2000x1000mm

TRANSFORMER STRIPS

- Class A 105°C
- BDV 12kV per mm in air
- Standard sizes
 - 3x10x2000mm
 - 4x10x2000mm
 - 5x10x2000mm
 - 6x10x2000mm
 - 8x10x2000mm
- Other sizes available on request



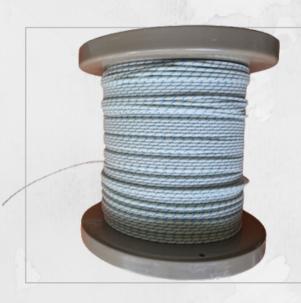
THERMAL INSULATION & TUBING (=



HEATSHRINK

- Shrink Ratio 2:1
- Operating temperature 35 to 125°C
- High chemical resistance
- Good abrasion resistance
- Colours Standard colours
- Minimum shrink temperature 115°C





NFG

- Temperature rating 350°C
- Silicone varnish & double glass braid
- BDV 300V
- Sizes 0.5/0.75/1.0/1.5/2.5/4.00mm ∅
- Colour white with blue tracer

RIGID MICA SHEETS

- Temperature rating 500°C
- Operating temperature 35 to 125°C
- 1200x1000mm sheet
- 0.4/0.5/0.6 /2.00mm density
- Colours Silver



CLEANING SOLVENTS



WATER BASED DEGREASER

- Is a general purpose cleaner and degreaser, formulated for the removal of oil, grease and other soils from all surfaces, by manual application or through highpressure cleaners.
- Available in 25-litre containers and 210-litre drums.





ELECTRICAL CLEANER

- Is an inhibited electrical safety solvent, with a flash point of greater than 90°C.
- Is relatively non-toxic, but should be used in a well-ventilated room.
- It is safe on all metals, but with prolonged contact, may attack some plastics.
- Available in 25 litre containers

OTHER PRODUCTS



DOGBONE SPACERS

- Pultruded dogbones used in dry type transformers.
- Full Class H.
- Sold in a 6x8/10x12/16x20 all by 2500mm in length.
- Sold per length and all white in colour.





WEDGES

- Insumat keeps a standard range of wedges in stock used for typical mush wound LV motor repairs.
- Thickness is 2.4x1220mm in length, thickness range from 3.5/4.5/5.5/6.7/7.5/8.5/10mm.

TOPSTICKS

- Pultruded and formed into half round wedges, these are standard stock items.
- Full Class H.
- 3x1.5/4x2/5x2.5/6x3/7x3.5/8x4 are the standard sizes kept in stock.
- They are all 1000mm in length.



OTHER PRODUCTS



MICA V RINGS

Mica V Rings can be manufactured to taylor-made requirements using the hot moulding mica that Insumat keeps in stock. The V Rings are not a stock item and only made to order. We will require either a sample or drawings for manufacture.



TEFLON SLEEVES

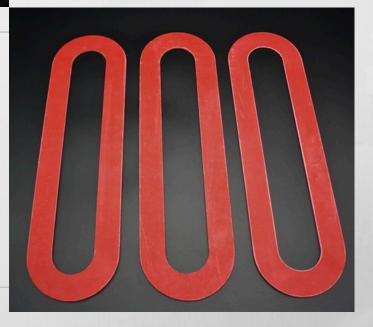
Insumat stocks a range of PTFE sleeves for traction motors. We keep GE761, D29, 6E, 178 (5M2) and MAMG.

Material is stored in black bags and out of direct sunlight.

GP03 SHIMS

Insumat keeps stock of GPO3 Shims for Interpole and can manufacture to required size.

We keep both narrow and broad shims for 5M2 traction motors.



OTHER PRODUCTS



PLASTIC FANS

Insumat keeps a range of plastic fans ranging from D90 – D180, terminal boxes, lids and terminal blocks. Please send us any enquiries you may have.





STARTING MOTOR CAPACITORS

- Capacitance 64-74uF to 500uF
- 275 VAC
- 50/60Hz

RUNNING MOTOR CAPACITORS

- Capacitance 5uF to 80uF
- 450 VAC
- 50/60Hz



CONTACT US

Want to get in touch? We'd love to hear from you. Here is how you can reach us.





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