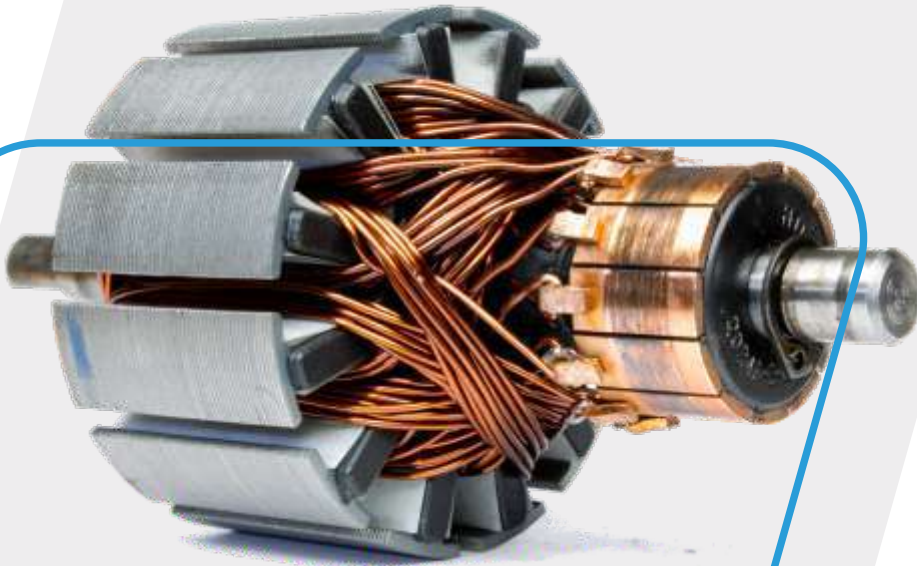




FINE FINISH INDUSTRIES PVT. LTD.

(Formerly known as Fine Finish Organics Private Limited)

— Excellence in Innovation —



PRODUCTS FOR **MOTOR** REWINDING

www.finefinish.net

FINECOAT® HR 708

- Finecoat®- HR 708 is single pack electrically insulating and heat resistant coating containing heat stable pigments and binders.

APPLICATIONS

- Finecoat®- HR 708 is a finishing varnish suitable for application on overhang and core pack of Class - B machines. It has excellent electrical insulating and anti-tracking properties.

PROPERTIES

- Thermal Class : B-F
- Shelf Life : 12 months
- Application method : Brush or Spray
- Drying time @30°C
 - (i) Surface dry : 4 hour (approx.)
 - (ii) Hard dry : 16 hours (approx.)
- Curing Schedule : 130°C for 30 minutes

INSUFINE® VI 610 (Golden)

Insufine®- VI 610 (Golden) is an impregnating varnish based on alkyd and phenolic resins and other reactants and additives. The solvents used are mild enough not to have any deleterious effect on enameled wires.

APPLICATION

- Insufine®- VI 610 (Golden) is ideally suited for impregnation of all wire wound motors of thermal rating 'F'.
- Insufine®- VI 610 (Golden) can be applied by brush, dip or spray impregnation. The preheated windings are kept in the impregnation chamber and evacuated.

PROPERTIES

- Colour : Pale Yellow
- Viscosity @25°C(B4 Flow cup) : 30-40 sec
- Curing in thin layer (Tack-free) : 2-3 hours at 35°C
- Flash point : 29°C

INSUFINE® VI 643

- Insufine®- VI 643 is an impregnating varnish based on polyester amides resin. The solvents used are mild enough on dual coated wires so as not to have any deleterious effect on enameled wires.

APPLICATIONS

- HT machines
- Traction machines
- Generators
- Dry type resin impregnated transformers
- Solenoid coils
- Special duty motors

PROPERTIES

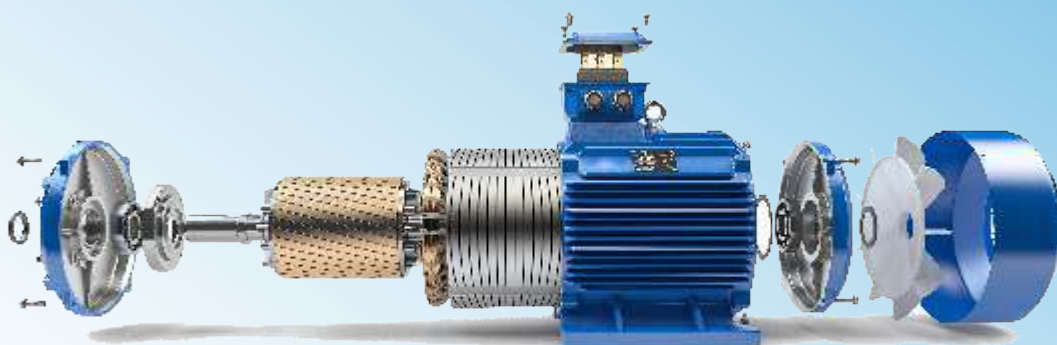
- Colour - Brown Clear liquid
- Storage life - 12 months
- Thermal Class - H

EPOFINE® 205/ FINEHARD® 905/ ACCELERATOR 061

Epofine®- 205 is a medium viscosity electrical grade liquid epoxy resin and Finehard® - 905 is a modified anhydride hardener. The resin and hardener is processed along with Accelerator-061.

APPLICATION

- Epofine®- 205 / Finehard®- 905 / Accelerator - 061 is suitable for manufacture of RIP Bushings, composites for electrical applications by pultrusion, pressure moulding or by filament winding. FRP composite rods and equipment cast or impregnated with the above resin and hardener are suitable for medium and high voltage applications and are REACH compliant.
- This system is also recommended for electrical grade Pultrusion applications, preferably with higher content of Accelerator - 061.
- For pultrusion applications, it is recommended to use an internal release agent, Finerelase - QZ10.



INSUFINE® VI 615

Insufine®- VI 615 is an impregnating varnish based on modified orthophthalic alkyd. The solvent used are mild enough not to have any deleterious effect on enameled wires.

APPLICATION

- Insufine®- VI 615 is ideally suited for impregnation of all wire wound motors of thermal rating 'F'.
- Insufine®- VI 615 can be applied by brush, dip or spray impregnation.

PROPERTIES

- Colour : Pale Yellow
- Viscosity @30°C (B4 Flow cup) : 50-85 sec
- Curing in thin layer : 1 hour at 120°C
- Curing schedule :
Stator windings : 4-6 hours at 120-130°C
Rotating windings : 6-8 hours at 120-130°C

FINECOAT® HR 704

Finecoat®- HR 704 is single pack electrically insulating and heat resistant coating containing heat stable pigments and binders.

APPLICATION

- Finecoat®- HR 704 is a finishing varnish suitable for application on overhang and core pack of Class - F machines. It has excellent electrical insulating and anti-tracking properties

PROPERTIES

- Colour : Red
- Drying time @30°C
(i) Surface dry : 1 hour (approx.)
(ii) Hard dry : 16 hours (approx.)
- Curing Schedule : 130°C for 30 minutes
- Shelf life : Minimum 12 months when stored in original sealed containers.

FINESET® - AE 933

Fineset®- AE 933 is a one component, solvent-containing, B-staging epoxy adhesive, offered as a clear solution.

APPLICATION

- Fineset®- AE 933 is an ideal adhesive compound suitable for loading polyester fleece for application in electric motors..
- for coating nomex sheets, which are used as slot insulation in HT machine
- used to bond the magnetic particles and then to press and cure to make bonded magnets
- excellent coating for electrical insulation of components like strain gauges
- consolidating resin for HT coils.

PROPERTIES

- Easy to use due it being a single-pack composition.
- Very slight odour.
- Decrease in viscosity on heating, which ensures good wetting.
- Normal contact pressure is adequate while curing
- Excellent heat resistance up to 180°C.
- Very Good chemical resistance and electrical insulation.

INSUFINE® VI 608

Insufine® VI 608 is an insulating varnish based on alkyd-phenolic resin. The solvents used are mild enough not to have any deleterious effect on other materials.

APPLICATION

- It is ideally suited for insulation of stamping steel for motors of thermal.
- It can be applied by spray or roller coating.
- The stamping sheet can also be passed through rollers over which varnish is dripped continuously and then the coated steel can be flash cured by passed through a conveyerized oven maintained at 200 – 250°C.
- It has an additional property that it is an excellent anti-termite coating.

PROPERTIES

- Colour: Dark Reddish Yellow
- Viscosity @25°C : 40-50 sec
- Curing in thin layer : 2-4 hours at 80-100°C
- Flash point : 32°C
- Thermal Class : F.





EPOFINE® - GC 916HV / FINEHARD® - 840

Epofine®- GC 916HV is a thixotropic epoxy resin used as a buttering compound for coating overhangs. Finehard®- 840 is a polyamidoamine hardener. It has a high mix viscosity making it ideal to be used as a buttering compound for electrical coils.

APPLICATION

- Finishing coat over varnish-impregnated coils, transformers, stators, armatures, bus bars, and other components of electrical machines for resistance to chemicals, moisture and tracking.
- Protective coat for electronic components such as capacitors, thermistors etc. for retention of electrical characteristics.

PROPERTIES

- Colour : Red
- Mixing Ratio : 100: 25-35 (by weight)
- Pot life : 1 Hour @25°C
- Gel time : > 60 min
- Thermal Class : F

INSUFINE® 1002

Insufine®- 1002 is an electrical grade solvent-free trickle impregnating resin based on modified polyesters.

APPLICATION

- impregnation of high speed electrical machines which tends to be overloaded like tools, grinders, drilling machines etc
- With Hardener – K or Hardener- K1 it cures in to a hard tough mass suitable as insulation in motors and transformers for almost all applications.

FINECOAT® C654

Finecoat®- C 654 is a one component, solvent containing composition, filled with specially treated colloidal graphite. This product has medium electrical conductivity.

APPLICATIONS

- Coating of high voltage insulating materials for field stabilization

PROPERTIES

- Drying time @30°C
 - (i) Surface dry : 15 minutes (approx.)
 - (ii) Tackfree dry : 1 hour (approx.)
 - (ii) Hard dry : 12 hours (approx.)

EPOFINE® 1162 / FINEHARD® 1102

Epofine®- 1162 is an electrical grade crystallizing epoxy resin, Finehard®- 1102 is an anhydride hardener. Finecure – B1061 is the accelerator for the system based on piperazine.

APPLICATIONS

- This system has proven capabilities for global impregnation of resin poor system.
- This is an ideal system for VPI (Vacuum Pressure Impregnation) of motors and generators
- For impregnation of Roebel bars in combination with porous mica paper tapes.

INSUFINE® CPV 600

Insufine®- CPV 600 is an insulating varnish based on modified polyester. This has very good stability at temperatures up to 200°C. The solvent used are mild enough not to have any deleterious effect on other insulating materials.

APPLICATIONS

- Insufine®- CPV 600 is ideally suited for coating of electrical sheet steel used in motors and generators, particularly for hydro generators of Class 'F' insulation.
- Insufine®- CPV 600 can be applied by roller coating and then cured in a conveyorized furnace. The sheet steel is first cleaned and then coated and put for lash-off for a few minutes followed by pre-drying and then curing. The highest temperature needed is 250-300°C for 1 minute.

PROPERTIES

- Colour: Pale Yellow to Light Brown Clear
- Viscosity @ 25°C : 115-145 sec
- Tack free drying in thin layer : 10 minutes at 210°C
- Flash point : 29 °C
- Thermal Class : F

INSUFINE® 1052

Insufine® - 1052 is an electrical grade solvent-free impregnating resin based on polyesterimides.

APPLICATION

- Standard Motors
- Large special purpose machines
- Distribution transformers

PROPERTIES

- Mixing ratio: Insufine® - 1052 : Hardener – P = 100 : 1 – 2 (w/w)
- Mix viscosity @25°C, mPas : 400 – 525
- Gel time @120°C : 20 – 30 min
- Activated resin life @23°C, min.: 3-6 months
- Curing schedule : 2 hours at 160°C (for large jobs)
- Thermal Class : H

INSUFINE® - 1080

Insufine® - 1080 is an electrical grade solvent-free, two-component trickle impregnating resin based on modified polyester-amides.

APPLICATION

- Insufine® - 1080 is suitable for trickle impregnation of motors of H thermal rating.
- With Hardener – K, it cures in to a hard tough mass suitable as insulation in motors and transformers for almost all applications.
- Electrical machines which tend to be overloaded like tools, grinders, drilling machines etc

PROPERTIES

- Mixing ratio: Insufine® - 1080 : Hardener – K = 100 : 2 (w/w)
- Mix viscosity 25°C, mPas : 425 – 525
- Gel time @120°C : 4 min
- Gel time @80°C : 30 – 45 min
- Activated resin life @23°C, min. : 20 days
- Curing schedule : 30 minutes at 130°C
- Thermal Class : H

FINESET® - 3093

Fineset®- 3093 is a two-pack, room-temperature curing, polyesterimide gelcoat. Component-A has thixotropic consistency and Component B is a low viscosity hardener.

APPLICATION

- Finishing coat over varnish-impregnated coils, transformers, stators, armatures, bus bars, and other components of electrical machines for resistance to chemicals, moisture and tracking.
- Coating of concrete tanks to prevent water seepage.
- Coating of concrete and other structural parts to prevent corrosion

PROPERTIES

- Colour : Red
- Mixing Ratio:Base : Hardener = 3:1 (by weight)
- Pot life : 1 Hour @30°C
- Thermal Class : H

FINECOAT® - TVA1410

Finecoat®- TVA1410 is a finishing varnish based on epoxy ester resin and contains inorganic fillers.

APPLICATION

Finecoat®- TVA1410 is used as a finishing varnish on

- Field coils
- Overhangs
- Transformers and
- Other electrical windings.

PROPERTIES

- Colour - Red
- Viscosity, @30°C, Sec. - 60 - 70
- Drying time @ 30°C
 - Surface dry - 30 min max
 - Hard dry - 12hr max
- Thermal Class - H



LV RANGE

INSUFINE® - 1040

Insufine® - 1040 is an electrical grade solvent-free, two-component trickle impregnating resin based on modified polyesterimides.

APPLICATION

- Suitable for trickle impregnation of motors of Class H thermal rating
- Typical applications are in high-speed electrical machines which tend to be overloaded like tools, grinders, drilling machines etc.

PROPERTIES

- Mixing ratio: Insufine® - 1040 : Hardener – K = 100: 2 (w/w)
- Mix viscosity @25°C, mPas : 100 – 200
- Gel time @120°C : ~ 4 minute
- Gel time @80°C : 35 – 50 minutes
- Activated resin life @23°C, min.: 7 days
- Curing schedule : 30 minutes at 140°C
- Thermal Class : H

FINESET® - 4435

Fineset® 4435 is a single component solvent-free epoxy impregnating compound, generally meeting the requirements of IEC: 60455-3-2003.

APPLICATION

Fineset® - 4435 is an electrical impregnating compound suitable for application by dip or by trickling for motors and armatures of all sizes and reactor bricks. For machines with large windings, the fill may not be complete by single application.

PROPERTIES

- Viscosity@ 25°C : 3000-6000 mPas
- Cure schedule : 160°C / 12h
- Thermal Class : H
- Shelf Life @< 23°C : 12 Months

HV RANGE

INSUFINE® - 2005

Insufine® - 2005 is an electrical grade solvent-free impregnating resin based on polyesterimides with vinyl toluene as diluent

APPLICATION

Insufine® - 2005 is ideal for impregnation of electrical coils which faces high G- value during the use. With Hardener – P, it cures in to a hard tough mass suitable as insulation in motors and transformers.

PROPERTIES

- Mixing ratio: Insufine® - 2005 : Hardener – P = 100: 1 (w/w)
- Mix viscosity @25°C, mPas : 450 – 550
- Gel time @120°C : 20 – 30 minutes
- Activated resin life @23°C, min.: 6 months
- Curing schedule : 4 hours at 160°C
- Thermal Class : H

INSUFINE® 3040

Insufine® 3040 is an electrical grade solvent-free impregnating resin based on epoxy resin modified with polyetherimides.

APPLICATION

- Insufine® 3040 is suitable for impregnation by simple dipping, Vacuum Pressure Impregnation (VPI), roll or by trickle.
- It provides high mechanical strength and electrical performance coupled with a high degree of flexibility.
- It is suitable for electrical machines which tends to be overloaded and where speed reversal operation is required.
- It substantially improves the reliability of standard motors. With Insufine® – 3040 it cures into a hard tough mass | suitable as insulation in motors and transformers for almost all applications.
- It is suitable for all rotating and static electrical machines, with continuous thermal rating of up to 200°C.

PROPERTIES

- Colour: Pale yellow to Brown clear liquid
- Viscosity at 25°C : 425 – 525 mPas
- Density at 25°C : 1.02 - 1.10 g/cc
- Flash Point : > 35°C
- Thermal Class : H



FINESET® - GC 916

Fineset®- GC 916 is a two-pack polyamide-cured, room-temperature (above 10°C) curing, epoxy gelcoat / antflash coating. Component-A has thixotropic consistency and Component B is low viscosity liquid. On mixing, it achieves brushable consistency. Spraying can be done by addition of up to 10% of Thinner-916.

APPLICATION

- Fineset®- GC 916 is intended to be used as Finishing coat over varnish-impregnate coils, transformers, stators, armatures, busbars, and other components of electrical machines for resistance to chemical, moisture and tracking.
- Protective coat for electronic components such as capacitors, thermistors etc. for retention of electrical characteristics.
- Coating of concrete tanks to prevent water seepage.
- Coating of concrete and other structural parts to prevent corrosion.

PROPERTIES

- Colour : Red/ White
- Finish : Semi glossy
- Mixing Ratio: Base: Hardener = 100 : 25 (by weight)
- Pot life : 1 hour @30°C
- Curing schedule : Full cure in 7days or 16h @30°C + 4 h@100°C
- Thermal Class : F

INSUFINE® VI 631J

Insufine®-VI 631J is an impregnating varnish based on modified polyester resin. The solvents used are mild enough not to have any deleterious effect on enameled wires.

APPLICATION

- Insufine®- VI 631J is ideally suited for impregnation of all wire wound motors and resinrich insulated motors. This is a flexible tough varnish. The thermal rating of this varnish is Class-F.

PROPERTIES

- Colour : Clear Liquid
- Viscosity @25°C (B4 Flow cup) : 115-145 sec
- Storage life : 12 months (at 10 – 30°C)
- Curing schedule :
 - Stationery windings : 4-5 hours at 130°C
 - Rotating windings : 8 hours at 130°C

FINECOAT® - SC 656P

Finecoat®-SC 656P is based on resin and silicon carbide. This is a high performance semiconducting paint for very high voltages. This is formulated for protection against glow discharges on coils of high voltage machines and is ideally suited for coils insulated with mica based insulation.

APPLICATION

- The semi-conducting varnish, Finecoat®- SC 656P is used to prevent surface discharges at the end of the iron groove mentioned above.

PROPERTIES

- Viscosity at 25°C : 1000±100 mPas
- Drying Time:
 - 1. Surface dry : < 30 minutes
 - 2. Hard dry : < 10 h
- Thermal Class : F

INSUFINE® 3313

Insufine® 3313 is an electrical grade solvent-free, single component impregnating resin based on epoxy resin modified with polyetherimides.

APPLICATION

- Insufine® 3313 is suitable for impregnation by simple Vacuum Pressure Impregnation (VPI) of rotating electrical machines insulated with resin-poor mica tapes with backing of either film or glass. It provides high mechanical strength and electrical performance coupled with a high degree of flexibility.
- It is suitable for electrical machines which tends to be overloaded and where speed reversal operation is required.
- It substantially improves the reliability of standard motors. It cures into a hard tough mass suitable as insulation in motors and transformers for almost all applications.
- It is suitable for all rotating and static electrical machines, with continuous thermal rating of up to 200°C.

PROPERTIES

- Colour: Brown clear liquid
- Viscosity at 25°C : 100 ± 20 mPas
- Gel time (20g, 120°C) : 7.5 ± 2 Minutes
- Density at 25°C : 1.10 ± 0.05 g/cc
- Thermal Class : H



FINE FINISH INDUSTRIES PVT. LTD.

(Formerly known as Fine Finish Organics Private Limited)

Excellence in Innovation

HEAD OFFICE

801, Sai Sangam, Sector 15, CBD Belapur,
Navi Mumbai – 400 614. Maharashtra
Ph. no. +91 22 2757 7349/ +91 93727 05938
+92 22 4123 8976 Telefax: +91 22 2756 0249

IN HOUSE R&D CENTRE

Plot No.29, New Chemical Zone,
M.I.D.C., Taloja – 410 208. Maharashtra
+91 90294 22224 / +91 90294 22223 /
+91 90298 29777

MANUFACTURING UNITS

Plot No. 76, New Chemical Zone
M.I.D.C., Taloja – 410208 Maharashtra

Plot no. D- 11, M.I.D.C., Mahad Industrial Area,
Birwadi, Mahad, Raigad- 402309

PROFICIENCY TESTING DIVISION , TRAINING SCHOOL, REFERENCE MATERIAL PRODUCER DIVISION

Platinum Properties, Unit B/4, Block No.6 G : 22-24, Part
A&B, Opposite Dena Bank, MIDC, Taloja, Navi Mumbai-
410208. Maharashtra
+91 90292 90228 / +91 93727 05934

Email: info@finefinish.net | Website: www.finefinish.net