#### GROW YOUR BUSINESS WITH US

POLYESTER RESIN GELCOATS VINLYESTER RESIN PIGMENT PASTES BONDING PASTES

# CATALOG





#### **POLYESTER RESINS - GELCOATS - PIGMENT PASTES**



#### GROW YOUR BUSINESS WITH US!

#### A message from the CEO

Polres Polyester Boya ve Kimya San.Tic. A.Ş. started the production of Polyester Resin in Turkey back in 2003 to bring new initiatives to the sector.

A well-established and professionally organized company, we are providing service for the various requirements of several industries. We have earned a reputation in global marketplace with reliable and trustworthy business organization. With the support of excellent R&D department and logistics, we have capabilities to give technical support and supply resin-based products to all over the world.

Our comprehensive program is in the polyester resin sector. We are a one of the leading provider of unsaturated polyester resins, gelcoats, pigment pastes.

#### THE MAIN FEATURES OF THE UNSATURATED POLYESTER RESINS

Easy to process and have very good physical properties especially when combined with fibre reinforcement. Finished products made of these polymers have become an integral part of our daily lives.

QUALITY FROM OWN DEVELOPEMENT We provide high-quality products that are made and developed in our own facilities. We are custom oriented formula-makers to fulfill the desired specifications.



# CONTENTS

#### **POLYESTER RESIN**

1-CASTING TYPE 3-GRP HAND LAY UP AND SPRAY UP 7-PULTRUSION 9-CONTINUOUS LAMINATING 11-HOT PRESS SMC & BMC 15-RTM - INFUSION 19-FILAMENT WINDING 19-CORROSION RESISTANT 23-ADHESIVE 23-PUTTY TYPE 25-FLAME RETARDANT 27-SPECIAL RESINS

#### GELCOATS

31-GENERAL PURPOSE 32-PERFORMANCE 33-HIGH-PERFORMANCE 33-HIGH-PERFORMANCE MARINE 35-MOLD-CHEMICAL RESISTANCE 37-SANDABLE-TOPCOAT 37-FLAME RETARDENT 37-BRIGHT TOPCOAT

39-VINYLESTER RESIN41- DONDING PASTES43-POLRES ADDITIVE



#### **CASTING TYPE**

Economic Flexable High Performance High Fill Acceptance Good Filler Wetting



	MICOCUTY	OFL TIME	DADCOL			
RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	
PRE-30 Solid Surface Casting Resin	700-800	7-8	40-45	Low shrinkage, High heat and chemical resistant, High fill acceptance, Excellent osmosis and UV resistance, Excellent brightness.	Specifically designed for the casting of solid surface applications.	
PRE-32 Clear Casting Type Polyester Resin	1200-1300	3-5	40-45	Good filler (calcite, dolomite, quartz, marble powder) wetting, Low shirinkage, Fast production cycle, Low cost production, Rapid barcol development.	Production of general casting applications, artificial marble, kitchen tops, bath counters, sanitary materials, bijouterie and gift materials.	
PRE-33 Clear Casting Type Polyester Resin	1200-1300	4-6	40-45	Good filler (calcite, dolomite, quartz, marble powder) wetting, Fast production cycle, Low shirinkage, Rapid barcol development.	Production of general casting applications, artificial marble, kitchen tops, bath counters, sanitary materials, bijouterie and gift materials.	
PRE-35 Casting Type Polyester Resin	500-650	4-7	37-40	Accepts high filler loads, Low shirinkage, Cost effective production.	Production of general casting applications, artificial marble, kitchen tops, bath counters, sanitary materials, bijouterie and gift materials.	
PRE-35LV Casting Type Polyester Resin	150-180	6-10	37-40	Accepts high filler loads, Low shirinkage, Cost effective production.	Production of general casting applications, artificial marble, kitchen tops, bath counters, sanitary materials, bijouterie and gift materials.	
PRE-3001 Solid Surface Casting Resin	700-800	7-8	40-45	Low shrinkage, High heat and chemical resistance, High fill acceptance, Excellent hydrolytic and UV resistance, Excellent brightness.	Specifically designed for the casting of solid surface applications.	
PRE-3101 Breton Type Polyester Resin	450-600	5-9	40-45	Light colored castings, Suitable for engineering casting technology, Wet quartz mineral very well, Does not crack at high temperatures, Low volumetric shrinkage, Contains UV absorber.	In the production of quartz based composite stone, In production lines where Bretonstone technology, which is an engineering casting technology is used.	
PRE-3103 Breton Type Polyester Resin	400-600	2-5	43-45	Light colored castings, Suitable for engineering casting technology, Wet quartz mineral very well, Does not crack at high temperatures, Low volumetric shrinkage, Contains UV absorber.	In the production of quartz based composite stone, In production lines where Bretonstone technology which, is an engineering casting technology is used.	
PRE-3104 Breton Type Polyester Resin	325-425	5-7	40-45	High filler acceptance, High temperature resistance, Low shrinkage, Wets the quartz mineral very well.	Engineering castings and quartz slabs, light castings.	
PRE-3106 Breton Type Polyester Resin	250-350	5-8	40-50	Light colored castings, Suitable for engineering casting technology, Wet quartz mineral very well, Does not crack at high temperatures, Low volumetric shrinkage.	In the production of quartz based composite stone, In production lines where Bretonstone technology, which is an engineering casting technology is used.	
PRE-3201 Casting Type Polyester Resin	600-800	9-12	45-50	Good filler (calcite, dolomite, quartz, marble powder) wetting, Low shirinkage, Fast production cycle, Low cost production, Rapid barcol development, Good casting color.	Production of general casting applications, artificial marble, kitchen tops, bath counters, bijouterie and gift materials.	

# Excellent resin for kitchen and bath countertops

Polres Casting resins have higher physical properties and higher heat resistance. We offer ultimate strength, durability, and beauty for cultured marble, onyx and solid surface products at very low cost

#### DESCRIPTION

Isophthalic/NPG based, acrylic modified, medium reactivity, high viscosity polyester resin.

Orthophthalic based, medium reactivity, medium viscosity, light bluish colored unsaturated polyester resin.

Orthophthalic based, medium reactivity, medium viscosity, light bluish colored unsaturated polyester resin.

Orthophthalic based, medium reactivity, low viscosity unsaturated polyester resin.

Orthophthalic based, medium reactivity, low viscosity, fast cure polyester resin.

Ortho/NPG based, acrylic modified, medium reactivity, high viscosity polyester resin.

Orthophthalic based, high reactivity, low viscosity polyester resin.

Orthophthalic based, high reactivity, low viscosity polyester resin.

Orthophthalic, high reactivity, medium viscosity acrylic modified breton type resin.

Orthophthalic based, low-medium reactivity, medium viscosity polyester resin.

Orthophthalic based, low-medium reactivity, medium viscosity general purpose resin.



GRP Hand Lay-up Spray-up

Polres has a broad Product range available for hand lay up/spray up



GRP

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-52TA GRP Type Acyrlic Backing Polyester Resin	180-200	10-13	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bath tub applications.	Orthophthalic based, medium reactivity, low viscosity, thixotropic, pre-accelerated, unfilled polyester resin.
PRE-52AB GRP Type Acrylic Backing Polyester Resin	200-250	10-12	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bath tub applications.	Orthophthalic based, medium reactivity, low viscosity, pre-accelerated, unfilled polyester resin.
PRE-60 General Purpose Polyester Resin	180-200	25-30	40-45	Fast curing, High filler of calcium carbonate, aluminium hy- droxide, marble powder acceptance for casting, Low volumetric shrinkage, Good handling characteristics.	FRP and casting.	Orthophthalic based, high reactivity, low viscosity polyester resin.
PRE-62 General Purpose Polyester Resin	300-450	5-8	40-45	Good wetting property of fiber, Low volumetric shrinkage, Good handling properties and stable jel time, Versatile use, Accepts high filler loads (Calcium Carbonate, Aluminium Hydroxide and marble powder) for casting applications.	GRP, FRP and casting.	Orthophthalic based, medium reactivity, medium-low viscosity, medium cure, resilent polyester resin.
PRE-63 General Purpose Polyester Resin	340-460	5-8	40-45	Good wetting property of fiber, Low volumetric shrinkage. Good handling properties and stable jel time, Versatile use, Accepts high filler loads(Calcium Carbonate, Aluminium Hydroxide and marble powder) for casting applications.	FRP and casting.	Orthophthalic based, medium reactivity, medium-low viscosity, medium cure, resilent polyester resin.
PRE-631TAB(1) Thixotropic Polyester Resin	1200-1400	20-25	42-47	Low volumetric shrinkage, Brightness and a vivid look, Fast and easy fiber wetting, Easy rolling, Paraffin free.	Hand Lay-up, Spray-up	Orthophthalic, medium reactivity, high viscosity, thixotropic, pre-accelerated with blue indicator unsaturated polyester resin.
PRE-631TAB(2) Thixotropic Polyester Resin	500-600	24-26	42-47	Low volumetric shrinkage, Brightness and a vivid look, fast and easy fiber wetting, Easy rolling, Paraffin free.	Hand Lay-up, Spray-up	Orthophthalic, medium reactivity, low viscosity, thixotropic, pre-accelerated polyester resin.
PRE-6309TAB Thixotropic Polyester Resin	300-400	20-23	42-47	Low volumetric shrinkage, Brightness and a vivid look, Fast and easy fiber wetting, Easy rolling, Paraffin free.	General Purpose Laminating, Hand Lay-up, Spray-up , Specially designed for fiber glass parts.	Orthophthalic, medium reactivity, high viscosity, medium cure, thixotropic, pre-accelerated polyester resin.
PRE-6309TAB (2) LSE Thixotropic Polyester Resin	300-400	19-21	42-47	Low volumetric shrinkage, Brightness and a vivid look, Fast and easy fiber wetting, Easy Rolling, Fast cure, Paraffin, Low styrene emulsion.	Hand Lay-up, Spray-up	Orthophthalic based, high reactivity, low viscosity, thixotropic, pre-accelerated with blue indicator polyester resin.
PRE-6309TAB White Thixotropic Polyester Resin	300-400	22-25	42-47	Low volumetric shrinkage, Brightness and a vivid look, Fast and easy fiber wetting, Easy roolling, Paraffin free.	General Purpose Laminating, Hand Lay-up, Spray up , Specially designed for fiber glass parts.	Orthophthalic based, medium reactivity, high viscosity, medium cure, thixotropic, white, pre-accelerated polyester resin.

# Hand Lay-up Advantages

Widely used for many years Simple principles to teach Low cost tooling Wide choice of suppliers and material types Higher fibre contents



### GRP Hand Lay-up Spray-up

High fill removal Excellent adhesion Good fiber wetting Low volumetric shrinkage High fill acceptance Good filling wetting property



parts.

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-6502TAB DCPD Based Thixotropic Polyester Resin	450-550	27-30	40	Low volumetric shrinkage, It is suitable for the production of thick parts, Excellent glass fiber wet out, Easy rolling, Its high thixotropic feature prevents the product from flowing when applied on vertical surfaces.	Hand Lay-up, Spray-up, Marine, transportation, building and construction industries.	DCPD based, medium reactivity, low viscosity, thixotropic, medium-fast curing, pre- accelerated polyester resin.
PRE-6901TAB Thixotropic Polyester Resin	800-1000	15-20	40-45	Low volumetric shrinkage, Brightness and a vivid look, Fast and easy fiber wetting, Easy rolling, Paraffin free, High mechanical value.	General Purpose Laminating, Hand Lay-up Spray-up, Specially designed for fiber glass parts.	Teraphthalic based, medium - high reactivity, medium viscosity, pre-accelerator, thixotropic polyester resin.
PRE-9000 General Porpose Polyester Resin	180-200	25-30	40-45	Fast curing, High filler of calcium carbonate, aluminium hydroxide, marble powder acceptance for casting, Low volumetric shrinkage.	FRP and casting	Orthophthalic based, high reactivity, low viscosity polyester resin.
PRE-9000A General Porpose Polyester Resin	180-200	25-30	40-45	Fast curing, High filler of calcium carbonate, aluminium hydroxide, marble powder acceptance for casting, Low volumetric shrinkage, Good handling characteristics.	FRP and casting	Orthophthalic based, pre-accelerated, high reactivity, low viscosity polyester resin.
PRE-52ABW GRP Type White Acrylic Backing Polyester Resin	200-250	10-12	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bath tub applications.	Orthophthalic based, medium reactivity, low viscosity, pre-accelerated, white, unfilled polyester resin.
PRE-52TAD GRP Type Acyrlic Backing Filled Polyester Resin	2000-3000	10-15	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bathtub.	Orthophthalic based, low reactivity, hight viscosity, thixotropic, pre-accelerated, white, filled polyester resin.
PRE-52TADW(1)GRP Type Acyrlic Backing Filled Polyester	250-300	15-20	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bathtub .	Orthophthalic based, low reactivity, hight viscosity, thixotropic, pre-accelerated, white, filled polyester resin.
PRE-521TAD GRP Type Acyrlic Backing Filled Polyester	2000-3000	10-15	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bathtub applications.	Orthophthalic based, low reactivity, high viscosity, thixotropic, pre-accelerated, white, filled polyester resin.
PRE-6502TAB DCPD Based Thixotropic Polyester Resin	450-550	27-30	40	Low volumetric shrinkage, It is suitable for the production of thick parts, Excellent glass fiber wet out, Easy rolling, Its high thixotropic feature prevents the product from flowing when applied on vertical surfaces.	Spray and hand lay up, Marine, transportation, building and construction industries.	DCPD based, medium reactivity, low viscosity, thixotropic, medium-fast curing, pre-accelerated polyester resin.
PRE-6502TAD DCPD Based Laminating Resin	2000-3000	10-15	40-45	Excellent adhesion to Acrylic and ABS sheet, Excellent fiber wetting, High fill removal, Includes Mek-P indicator.	It is used in bathroom counter, shower cabin, sink, acrylic bathtub applications.	DCPD based, low reactivity, hight viscosity, thixotropic, pre-accelerated, filled polyester resin.

### Spray-up Process Offers The Folowing Advantages

It is suitable for small to medium-volume

It is a very economical process for making small to large parts.

It utilizes lowcost tooling as well as lowcost material systems.



### GRP Hand Lay-up Spray-up

High heat and corrosion resistance Low volumetric shrinkage Good handling characteristics Easy rolling Excellent glass fiber wet out High fill acceptance



Creating the perfect shower tray is a lot easier with our envious selection of our acyrilic, ABS resins.Higher fibre contents

RESIN NAME	VISCOSI- TY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-6514 DCPD Based Polyester Resin	200-250	13-18	40-50	Good wetting property of fiber, Low volumetric shrinkage, Good handling properties and stable jel time, Versatile use, accepts high filler loads (Calci- um Carbonate, Aluminium, Hydroxide and marble powder) for casting applications.	It is used in automotive sector, swimming pool appli- cations, production of tractor and heavyduty vehicle cabins also it is optimized for marine applications such as yatch, boats and catamarans.	DCPD based, medium reactivity unsaturated polyester resin. DCPD modification increases high fill load capacity and mechanical properties.
PRE-6514(LSE) DCPD Based Polyester Resin	200-250	13-18	40-50	Low volumetric shrinkage low styren emulsion. It is suitable for the production of thick parts, Excellent glass fiber wet out Easy rolling.		DCPD based, medium reactivity unsaturated polyester resin. DCPD modification increases high fill load capacity and mechanical, roperties. Contains paraffin to ensure low styrene emulsion.
PRE-6514TAB DCPD Based Thixotropic Polyester	500-600	20-30	40	Low volumetric shrinkage, It is suitable for the production of thick parts, Excellent glass fiber wet out, Easy rolling.	Spray up, Hand lay up.	DCPD based, medium reactivity, low viscosity, thixotropic, medium curing, pre-accelerated polyester resin.
PRE-6514TAB White DCPD Based Thix Polyester	500-600	20-30	40	Low volumetric shrinkage, It is suitable for the production of thick parts, Excellent glass fiber wet out, Easy rolling.	Spray up, Hand lay up.	DCPD based, medium reactivity, low viscosity, thixotropic, medium curing, pre-accelerated white polyester resin.
PRE-6516 DCPD Based Polyester Resin	400-450	10-15	30-40	High fill removal, Easy dispersion, High fiber wet- ting property, Good handling characteristics, Flexible, Low volumetric shrinkage.	GRP, FRP and clear casting.	DCPD based, orthophthalic, high reactivity, low viscosity polyester resin.
PRE-6520 DCPD Based Polyester Resin	180-200	3-5	30-40	Good filling removal, Easy dispersion, Good fiber wetting property, Good handling characteristics, Flexible, Low volumetric shrinkage,UV resistance.	GRP, FRP and clear casting.	Orthophthalic based, high reactivity, low viscosity DCPD based polyester resin.
PRE-7400 Chemical Resistance Polyester Resin	400-450	15-20	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane.	Specifically formulated for pultrusion processing and filament winding, Spray wind process, For room temparature curing systems, it is generally used with an aniline promoter and with BPO paste as the catalyst.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7400TAB Thix Chemical Resistance Polyester	500-600	16-25	40-45	Rapid cure, Very good wetting, Excellent chemical resistance, High heat and corrosion resistance.	Hand lay-up, Spray-up, Spray winding, Fiberglass reinforced parts production.	Isophthalic based, high reactivity, low viscosity, pre-accelerated, thixotropic, polyester resin.

### **Creating The Perfect** Shower Tray

#### GRP Hand Lay-up Spray-up

For different usage and applications Use in the production of all kinds of plumbing fittings chemical raw metarial stroge, duct and insulation materials



Chemical resistant suitable for sanitary ware Good physical proporties Different gel and curing times according to usage Use of different filling according to the application

RESIN NAME	VISCOSI- TY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-7401 Chemical Resistance Polyester Resin	400-600	9-15	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Fast trim time, Rapid cure, Meets military specification.	Spray-up, Spray-winding, Centrifugal casting.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7401TAB Thix Chemical Resistance Polyester	400-600	13-14	47-50	Rapid cure, Fast trim time, Very good wetting, Excellent chemical, heat and corrosion resistance, Meets military specification MIL-R-7575C, FDA compliance, suitable for certain food contact surface.	Hand lay-up, Spray-up Spray winding, Centrifugal casting, Production of fiberglass reinforced plastics parts,where are high Chemical resistance and high heat distortion are required.	Rigid, medium reactive, low viscosity, thixotropic, isophthalic based laminating resin pre-promoted for room temperature curing.
PRE-7402 Chemical Resistance Polyester Resin	850-1050	5-7	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gel coats, Filament winding, Pultruzion, Press molding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-7403TAB Thix Chemical Resistance Polyester	450-550	20-22	40-45	Long gel time medium cure, Excellent chemical, heat and corrosion resistance, Very good fiber wet-out, Low exotherm.	Hand Lay-up or spray-up systems, Production of fiberglass reinforced plactic parts, where good chem- ical resistance and high heat distortions are required, Ideally suited for boat molds, marine gelcoat backup, chemical holding tanks and applications where good thermal dimensional stability is necessary.	Isophthalic based, rigid, low viscosity, medium reactivity, thixotropic, prepromoth for room temperature unsaturated laminating polyester resin.
PRE-7404 Chemical Resistance Polyester Resin	325-375	8-12	40-45	Fast gel, medium cure, Good chemical resistance, Low exotherm, Good wetting characteristics.	Filament winding	Isophthalic based, high viscosity, medium reac- tivity, resillient unsaturated polyester resin.
PRE-7404TAB Thix Chemical Resistance Polyester	325-375	15-16	40-45	Rapid cure, Very good wetting, Excellent chemical, heat and corrosion resistance.	Hand-lay up, Spray-up	Isophthalic based, medium reactivity, low vis- cosity, pre-accelerated, thixotropic, unsaturated polyester resin.
PRE-7405 Chemical Resistance Polyester Resin	450-550	45-55	40-45	Slow gel and cure, Longer working time, Good wetting characteristics, Low exotherm.	Hand lay-up of rigid fiber glass reinforced plastics.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-7405 TAB Thix Chemical Resistance Polyester	450-550	45-50	40-45	Slow gel, Slow cure, Longer working, Good spray and wetting, Excellent Chemical, heat and corro- sion resistance, Low Exotherm.	Hand-lay up, Spray-up	Isophthalic based, medium reactivity, low vis- cosity, pre-accelerated, thixotropic, unsaturated polyester resin.
PRE-7406 Chemical Resistance Polyester Resin	250-400	25-35	40-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Good dimensional stabiliy, Excellent green strength.	Specifically formulated for pultrusion processing and filament winding, For room temparature curing systems, it is generally used with an aniline promoter and with BPO paste as the catalyst.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7407 Chemical Resistance Polyester Resin	1100-1400	9-14	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gelcoats, Filament winding, Pultruzion, Press molding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.



#### **Pultrusion Resin**

Developed for High strength and chemical Resistance Pulturion Profiles Excellent Mechanical values



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-75 Pultrusion Type Chemical Resistance Polyester	1000-1200	4-8	45-50	Excellent Chemical and corrosion resistance, Good physical proporties, Good heat resistane, UV resistance.	Specifically formulated for pultrusion processing.	Isophthalic based, high viscosity, high reactivity, rigid polyester resin.
PRE-76 Pultrusion Type Chemical Resistance Polyester	400-450	15-20	45-50	Excellent mechanical and thermal properties, Resistant to waste water and many mildly corrosive chemicals, High modulus of elasticity and elongation at break.	It is a resin that can be used to obtain GRP products. Also very good mechanical values and thermal as a general purpose Isophthalic resin with its strength values in the automotive industry.	Isophthalic based, low viscosity, medium reactivity polyester resin.
PRE-77 Pultrusion Type Polyester Resin	350-550	8-15	42-48	Fast demolding, Good fiber wetting, Low viscosity.	Suitable for hand lay-up, filament winding and also pultrusion production methods. It is used in the contruction of complete cabins or parts, trac- tor and caravans. Construction of sea equipment.	Orthophthalic based, low viscosity, medium reactivity polyester resin.
PRE-78 Pultrusion Type Polyester Resin	400-600	15-20	40-45	Fast demolding, Good fiber wetting, High HDT.	It is designed for pultrusion application.	Orthophthalic based, low viscosity, high reactivity polyester resin.
PRE-79TE Pultrusion Type Polyester Resin	400-500	12-18	40-50	Fast demolding, Good fiber wetting, Low viscosity.	FRP applications are used to make corrugaed sheets, modular cabins, boats, tanks, pipes, shower cabins, car bumpers and building materials.	Terephthalic based, medium reactivity, medium viscosity unsaturated polyester resin.
PRE-6902TE Pultrusion Type Chemical Resistance Resin	700-800	7-7'30	45-50	Rapid cure, Very good wetting, High filler acceptance, Excellent Chemical, heat and corrosion resistance, High mechanical properties, High heat deflection temperature.	Hand lay-up and Spray-up, Filament winding, Production of high chemical and heat resistant storage tanks.	Teraphthalic based, high reactivity, accelerated medium viscosity unsaturated polyester resin.

### High Strength Resin

Low viscosity and long pot life Fast curing and excellent mechanical property Highy Tg(>100 C) and excellent heat resistance Excellent bounding performance of glass and carbon fiber It is suitable for pultrusion composites part



#### **Continuous Laminating**

For Roofing Sheets, GreenHouse Cover, Domes And Structural Panels, Where light transmittance is required

Good wetting properties Show exceptional gloss Resistance to yellowing Impact strength and mechanical properties



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-18L Continuous Lamination Polyester Resin	200-240	4'10"-4'20"	35-40	Good wetting properties, Show exceptional gloss, Resistance to yellowing, Impact strength and mechanical properties, Light permeable.	Widely used in roofing sheets, domes and structural panels.	Orthophthalic, high reactivity, low viscosity, light permeable unsaturated polyester resin.
PRE-19L Continuous Lamination Polyester Resin	240-260	4-5	40-45	Good wetting properties, Show exceptional gloss, Resistance to yellowing, Impact strength and mechanical properties, Light permeable.	Widely used in roofing sheets, domes and structural panels.	Orthophthalic, medium - high reactivity, low viscosity, unsaturated polyester resin.
PRE-20L Continuous Lamination Polyester Resin	175-200	10-14	40-45	Good wetting properties, Show exceptional gloss, Resistance to yellowing, Impact strength and mechanical properties, Light permeable.	Widely used in roofing sheets, domes and structural panels.	Orthophthalic, medium - high reactivity, low viscosity, unsaturated polyester resin.



Continuous lamination is used to produce composite products such as opaque and translucent flat or corrugated paneling, truck trailer paneling, refrigerator liners, sanitary paneling, road signs and other similar products.





#### Hot Press SMC and BMC Resin

High quality surfaces for automotive and machine equipment SMC-BMC parts

### High reactive resins for smc-bmc applications

Polres SMC-BMC resins offers superior strength, electrical insulation and excellent flow characteristics

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-40 SMC-BMC Type Polyester Resin	1100-1200	10-14	45-55	Orthophtalic Based SMC / BMC Type Polyester has fast thickening behavior with Magnesium Oxide, It contains special glycols a very bright and smooth surface is obtained, It is also suitable use with thermoplastic resins that prevent volumetric shrinkage.	Orthophtalic Based SMC / BMC Type Polyester is a high reactivity polyester specially designed for compression molding process.	Orthophtalic based, medium viscosity, high reactivity unsaturated polyester resin.
PRE-41 SMC-BMC Type Polyester Resin	1000-1200	10-12	45-50	High reactivity, High mechanical and thermal properties, Accepts high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive Parts, Machine Equipment, Electricity, Gas Cans and equipment production.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-42 SMC-BMC Type Iso-Npg Polyester	1200-1600	10-13	48-52	High chemical and atmospheric resistance, High reactivity High mechanical and thermal properties, Accepts a high percentage of fillers, Perfect compatibility with thermoplastic additives, Stable dough thickening curve.	, Automotive Parts, Machine Equipment, Electricity, Gas Cans and equipment production.	ISO/NPG based, high viscosity, high reactivity unsaturated polyester resin.
PRE-43 SMC-BMC Type Polyester Resin	1000-1200	4'30'' – 5'30''	45-50	High reactivity, High mechanical and thermal properties, Acceptsa high percentage of fillers, High compatibility with LSA (low tensileadditives) thermoplastics, Stable dough thickening curve.	Automotive Parts, Machine Equipment, Electricity, gas cans and equipment production.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-44 SMC-BMC Type Izo Polyester Resin	1600-1900	14-15	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve, Chemical resistant.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production.	Isophthalic acid based, high viscosity, high reactivity unsaturated polyester resin.
PRE-45 SMC-BMC Type Polyester Resin	1600-1900	16-20	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (Low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-46 SMC-BMC Type Polyester Resin	1400-1600	6- 8	42- 47	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.



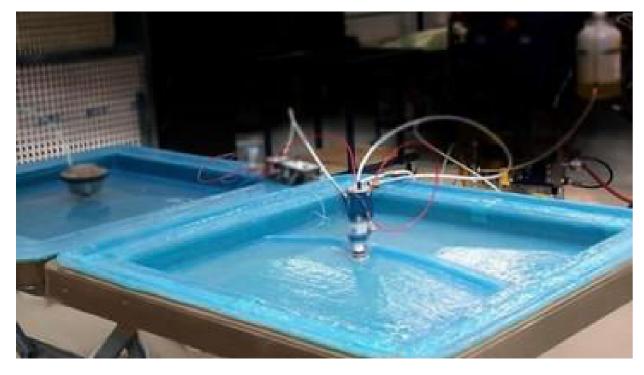
### Hot Press SMC and BMC Resins

High quality surfaces for automotive and machine equipment SMC-BMC parts

### High reactive resins for smc-bmc applications

Polres SMC-BMC resins offers superior strength, electrical insulation and excellent flow characteristics

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-47 SMC-BMC Type Polyester Resin	1600-1900	8-10	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-48 SMC-BMC Type Polyester Resin	1000-1200	8-10	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production, City furniture.	Orthophtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-49 SMC-BMC Type Iso-Npg Polyester Resin	1200-1500	14-15	45-50	High chemical and atmospheric resistance, High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, Perfect compatibility with thermoplastic additives, Stable dough thickening curve.	Automotive Parts, Machine Equipment, Electricity, gas cans and equipment production, City Furniture.	ISO/NPG based, high viscosity, high reactivity unsaturated polyester resin.
PRE-431TE SMC-BMC Type Polyester Resin	1000-1200	4'30'' – 5'30''	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive Parts, Machine Equipment, Electricity, gas cans and equipment production.	Teraphtalic based, high viscosity, high reactivity unsaturated polyester resin.
PRE-4301 SMC-BMC Type Polyester Resin	1000-1200	4'30'' – 5'30''	45-50	High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, High compatibility with LSA (low tensile additives) thermoplastics, Stable dough thickening curve.	Automotive parts, Machine equipment, Electricity, gas cans and equipment production, Manhole cover and loophole production.	Orthophtalic based, acrylic modified, amine cured , high viscosity, high reactivity unsaturated polyester resin.
PRE-4401 Chemical Resistance SMC -BMC Polyester	1200-1600	10-13	48-52	High chemical and atmospheric resistance, High reactivity, High mechanical and thermal properties, Accepts a high percentage of fillers, Perfect compatibility with thermoplastic additives, Stable dough thickening curve, High HDT value.	Automotive parts, Machine equipment Electricity, gas cans and equipment production.	Iso based, high viscosity, high reactivity unsaturated polyester resin.



## **RTM** - Infusion Resins Light in Weight High in Strength

Components made from Polres RTM resins have exceptional consistency , superior finish and good mechanical strength, tooling flexibility, good surface quality, less material wastage, large and complex shapes, wide range of reinforcements and zero air entrapment with in the product.

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-80 RTM-INF Type ISO-NPG Polyester Resin	400-600	18-20	40-50	Versatile use, High HDT and mechanical properties, Fast barcode development, Low viscosity, excellent fiber wetting, High thermal and chemical resistance.	It is designed for composite parts production, Hand lay-up, Cold press, Pultrusion methods, Especially the RTM method.	ISO/NPG based, medium reactivity, low viscosity polyester resin.
PRE-81 RTM-INF Type Polyester Resin	150-250	12-14	45-50	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance.	Automotive, Building sector, RTM-Infusion.	Orthophthalic based, medium reactivity, low viscosity, polyester resin.
PRE-82 RTM-INF Type Dcpd Based Polyester	300- 350	20-25	45-50	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance, Fast cure.	Automotive, Building sector, RTM-Infusion.	Orthophthalic- DCPS based, high reactivity, low viscosity, polyester resin.
PRE-83 RTM Type Polyester Resin	250- 350	12-16	45-50	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance, Acrylic modified.	Automotive, Building sector.	Orthophthalic based, medium reactivity, low viscosity, polyester resin.
PRE-84A RTM Type Polyester Resin	250- 300	5-6	40-45	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance.	Automotive, Building sector.	Orthophthalic based, low reactivity, low viscosity, pre-accelerated polyester resin.
PRE-84TA LSE RTM Type Polyester Resin	500- 600	6-7	40-45	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance, Low styrene emulsion.	Automotive, Building sector.	Orthophthalic based, low reactivity, low viscosity, thixotropic, pre-accelerated polyester resin.
PRE-85A RTM Type Iso Polyester Resin	230- 260	7-9	40-45	High mechanical values, Excellent fiber wetting, Low vol- umetric shrinkage, High fill acceptance, High chemical resistance, High impact resistance, does not crack	Automotive, Building sector, Water slides, RTM-Infusion.	Isophthalic based, medium reactivity, low viscosity, pre-accelerated polyester resin.
PRE-86 RTM Type Iso Polyester Resin	180- 200	16-20	45-50	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance, High chemi- cal resistance, High impact resistance, does not crack	Automotive, Building sector, Water slides.	Isophthalic based, medium reactivity, low viscosity, polyester resin.
PRE-87 RTM Type Polyester Resin	145- 165	7-9	40-45	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance.	Automotive, Building sector.	Orthophthalic based, medium reactivity, low viscosity, polyester resin.
PRE-88 RTM Type Polyester Resin	190-210	8-10	40-45	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance.	Automotive, Building sector.	Orthophthalic based, low reactivity, low viscosity, polyester resin.
PRE-88A RTM Type Polyester Resin	230-260	7-9	40-45	High mechanical values, Excellent fiber wetting, Low volumetric shrinkage, High fill acceptance.	Automotive, Building sector.	Orthophthalic based, low reactivity, low viscosity, accelerated polyester resin.



#### Filament Winding Resin

Suitable to process composite parts requiring precise tolerances

Designed with excellent glass wet-out for the filament winding processIn

filament winding method, fiber strands are unwind and passed continuously to the resin tank. In resin tank, fiber strand are impregnated completely with the resin. Now, these resin impregnated strands are passed onto a rotating mandrel. These strands are wound around the mandrel in a controlled manner and in a specific fiber orientation.



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-64 Pipe Type Polyester Resin	350-450	10-12	40-45	Faster wetting for fiber, Rapid curing, Easy air release, Smooth and glossy surfaces, High mechanical strength.	GRP and Flament winding processes.	Orthophthalic based, high reactivity, low viscosity polyester resin.
PRE-65 Pipe Type Polyester Resin	250-350	10-20	40-45	Faster wetting for fiber, Rapid curing, Easy air release, Smooth and glossy surfaces, High mechanical strength.	GRP and Flament winding processes.	Orthophthalic based, high reactivity, low viscosity polyester resin.
PRE-66 Pipe Type Chemical Resistanse Liner Polyester	500- 700	20- 30		It is an extremely flexible polyester with an elongation of 60% when cured alone, It is possible to use it together with other polyesters to increase flexibility, Elongation value at 60% break, Low styrene content.	GRP and Flament winding processes.	Isophthalic based, low reactivity, low viscosity liner polyester resin.
PRE-67 Pipe Type Isophthalic Polyester Resin	250-350	25-35	40-45	Faster wetting for fiber, Rapid curing, Easy air release, Smooth and glossy surfaces, Excellent corrosion resistance, Good chemical resistance and flexibility, High mechanical and electrical strength, Cost effective process, Low water absorption, Hydrolytic stability.	It is suitable for pipes, tubes, tanks and general purpose yarn winding products.	Medium reactivity, low viscosity, non Pre- accelerated unsaturated polyester resin based on izophthalic acid for filament winding applications.
PRE-68 Pipe Type Polyester Resin	250- 350	14-16	40-45	High mechanical test values , Resistance to wastewater and many slightly corrosive chemicals, High modulus of elasticity and elongation value at break, High pressure resistance in produced pipes, Low product viscosity, good fiber wetting.	It is suitable for pipes, tubes, tanks and general purpose yarn winding products.	Medium-high reactivity, low viscosity, non pre-accelerated unsaturated polyester resin based on ortophthalic acid for filament winding applications.
PRE-641TE Pipe Type Polyester Resin	350- 400	13-24	40-45	Easy air release, Smooth and glossy surfaces, Excellent corrosion resistance, High mechanical and electrical strength, Cost-effective process, Low water absorption, Faster wetting for fiber, Rapid curing.	It is suitable for pipes, tubes, tanks and general purpose yarn winding products.	Medium reactivity, low viscosity, non pre accelerated unsaturated polyester resin based on teraphthalic acid for filament winding applications.
PRE-651A General Purpose Polyester Resin	400- 500	19-22	45-50	Fast wetting for fiber, Water durable, Optimum cure, High mechanical properties, Capable of accepting high filler loading.	GRP and Flament winding processes, Suitable for Sewer production, Suitable for Pipe production.	Orthophthalic based, high reactivity, me- dium viscosity, pre-accelerated, fast cure polyester resin.
PRE-1209T Chemical Resistant Sewer Pipe Line Repair	1250-1300	6-9	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Superior drain out resistance, Fast cure at moderate temperature.	Pipeline repair by molded in lining as in the insituform process.	Isophthalic based, high viscosity, thixopic, medium reactivity, rigid unsaturated polyester resin.





19



#### **Corrosion Resistant**

We offer proven, durable performance for a world of end-uses such as pipe, tanks, water and wastewater treatment, chemical processing, cooling towers, pulp and paper, mining and power generation

#### Designed to give maximum corrosion protection

Excellent corrosion resistance to a wide variety of corrosive elements High mechanical properties with high tougness and crack resistance High resistance against water / moisture Good surface tolerance and adhesion Excellent wetting for fiber Good final cure

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-7400 Chemical Resistance Polyester Resin	400-450	15-20	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane.	Specifically formulated for pultrusion processing and filament winding, Spray wind process, for room temparature curing systems, it is generally used with an aniline promoter and with BPO paste as the catalyst.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7401 Chemical Resistance Polyester Resin	400-600	9-15	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Fast trim time, Rapid cure, Meets military specification.	Spray-up, Spray-winding, Centrifugal casting.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7402 Chemical Resistance Polyester Resin	850-1050	5-7	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gel coats, Filament winding, Pultruzion, Press molding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-7404 Chemical Resistance Polyester Resin	325-375	8-12	40-45	Fast gel, medium cure, Good chemical resistance, Low exotherm, Good wetting characteristics.	Filament winding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-7405 Chemical Resistance Polyester Resin	450-550	45-55	40-45	Slow gel and cure, Longer working time, Good wetting characteristics, Low exotherm.	Hand lay-up of rigid fiber glass reinforced plastics.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-7406 Chemical Resistance Polyester Resin	250-400	25-35	40-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Good dimensional stabiliy, Excellent green strength.	Specifically formulated for pultrusion processing and filament winding for room temparature curing systems, it is generally used with an aniline promoter and with BPO paste as the catalyst.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7407 Chemical Resistance Polyester Resin	1100-1400	9-14	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gel coats, Filament winding, Pultruzion, Press molding.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.

### Chemical Resistance Resin

Perfect physical proporties Good heat and UV resistance Cost effective process Smooth and glossy surfaces Excellent chemical and corrosion resistance Rapid cure Low water absorbsion High resistance to cracking



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-7408 Chemical Resistance Polyester Resin	450-550	25-35	45-50	Excellent wetting and rolling properties, Corrosion resitant, Low odour and styrene emissions.	Hand lay-up	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin
PRE-7409 Chemical Resistance Polyester Resin	850-1050	5-7	40-45	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, High elongation, High flexural strength, High resistance to cracking.	Specifically formulated for pultrusion pro- cessing and filament winding, Press molding, Base resin for manufacturing gelcoats.	Isophthalic based, low viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7410 Chemical Resistance Polyester Resin	350-500	10-15	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat resistane, Fast cure.	Specifically formulated for pultrusion processing and filament windind.	Isophthalic based, medium viscosity, medium reactivity, rigid unsaturated polyester resin.
PRE-7411 Chemical Resistance Polyester Resin	400-450	8-10	40-45	Rapid cure, Excellent fiber wetting, Excellent chemical, heat and corrosion resistance, Very good mechanical values.	Hand Lay-up, Spray-up	Isophthalic based, high reactivity, low viscosity, polyester resin.
PRE-7412 Chemical Resistance Polyester Resin	350-500	10-15	45-50	Rapid cure, Excellent fiber wetting, Excellent Chemical, heat and corrosion resistance very good mechanical values.	Hand Lay-up, Spray-up	Isophthalic based, high reactivity, low viscosity, polyester resin.
PRE-7414 Chemical Resistance Polyester Resin	700-800	7-8	40-45	Rapid cure, Excellent fiber wetting, Excellent chemical, heat and corrosion resistance, Very good mechanical values.	Hand Lay-up, Spray-up	Isophthalic-NPG based, high reactivity, medium viscosity, polyester resin.
PRE-7415 ISO/NPG High Chemical Resistance Polyester Resin	2000-2500	8-15	45-48	Rapid cure, Excellent fiber wetting, Excellent chemical, heat and corrosion resistance, Very good mechanical values.	Hand Lay-up, Spray-up	Isophthalic- NPG based, midium viscosity, high reactivity polyester resin.
PRE-7501 Chemical Resistance Polyester Resin	1000-1200	4-8	45-50	Excellent chemical and corrosion resistance, Good physical proporties, Good heat and UV resistance.	Specifically formulated for pultrusion processing.	Isophthalic based, high viscosity, high reactivity, rigid polyester resin.
PRE-671 General Purpose Chemical Resistance Polyester	350-400	6-8	40-45	Faster wetting for fiber, Rapid curing , Easy air re- lease , Smooth and glossy surfaces , Excellent corrosion resistance , Good chemical resistance and flexibility, High mechanical and electrical strength, Cost effective process, Low water absorption and hydrolytic stability.	GRP and filament winding processes, Sewer pipe, Pipe production, Where chemical, mechanical and corrosion resistance is high.	Isophthalic based high reactivity, low viscosity, filament winding polyester resin.







#### **Powerful Adhesive Resins**

When you need a powerful adhesive to bond stone, look no further than Polres high performing adhesives for stone

**High strength formula** Our high strength adhesive resin has been specially formulated as a high-performance

**Easy Sanding and Drying For Putty** Good adhesion on almost all metal surfaces including aluminium and mild steel Polres putty resins are suitable for a variety of uses, specially to repair car bodyworks, boats, fill and assemble glass wool products.



#### MARBLE ADHESIVE

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-20 Adhesive Type Polyester Resin	1200-1300	3-5	40-45	Very good adhension to marble, Fast hardening (20-40 min- utes), No color change, cracking or shrinkage during hard- ening period, Good working properties (grinding, milling), Gesistant to alkalis and diluted acid solutions, Resistant to UV.	Bonding of natural stones like marble, travertine etc.	Orthophthalic based, medium reactivity, medium viscosity, light bluish colored unsaturated polyester resin.
PRE-22 Adhesive Type Polyester Resin	500- 550	12-16	36-55	Very good adhension to marble, Fast hardening (20-40 minutes), No color change, cracking or shrinkage during hardening period, Good working properties (grinding, milling), Resistant to alkalis and diluted acid solutions Resistant to UV.	Bonding of natural stones like marble, travetine.	Medium reactive, medium viscosity, amine accelerated and DCPD based unsaturated polyester resin.
PRE-23 Adhesive Type Polyester Resin	350- 500	6-9	40-45	Good filler (calcite, dolomite, quartz, marble powder) wetting, Low shirinkage, Fast production cycle, Low cost production, Rapid barcol development, High fill acceptance.	Marble adhesive manufacture.	Orthophthalic based, low reactivity, medium viscosity general purpose resin.
PRE-24 Adhesive Type Polyester Resin	550-650	16-20	40-45	Good filler (calcite, dolomite, quartz, marble powder) wet- ting, Low shirinkage Fast production cycle, Low cost production, Rapid barcol development, High fill acceptance.	Marble adhesive manufacture.	Orthophthalic based, high reactivity, medium viscosity general purpose resin.

#### **PUTTY TYPE**

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
Polres UPE Putty Type Polyester Resin	500-550	12-14			Car repair putty production, This resin can use by mixing with Polres GMP.	DCPD based, resilient, high reactivity, low viscosity, amine accelerated putty type polyester resin.
Polres GMP Flexible Putty Type Polyester Resin	500-550	10-16	30-40	High filler acceptance, Easy sandable, Excellent adhesion and high strength, High flexibility.	Car repair putty production, This resin can use by mixing with Polres UPE.	DCPD based, high reactivity, low viscosity, high flexibility amine accelerated putty type polyester resin.



# <sup>25</sup> Flame Reterdant Resins

For advanced technology, non-halogenated parts production High Performance resin for low flame / low smoke applications

### Certificated

UL94-V0 / BS-476 Part 7 Class 1 / EN-45545 R1 HL3



RESIN NAME	VISCOSITY	GEL	BARCOL	FEATURES	APPLICATION	DESCRIPTION
	(CPS)	TIME (MIN)				
PRE-1600FRH Flame Retardant Halogened Clear Polyester	300-350	10-12	40-45	High limit oxygen index value, Transparent structure without filling, high light transmittance, Excellent fiber wetting, Contains halogen.	CTP applications, Lighting Elements, Roof cover materials, Office partition materials.	HET Acid-based, low reactivity, low viscosity, transparent flame retardant unsaturated polyester resin.
PRE-1610FRHI Flame Retardant Hal- ogened Clear Polyester	300-350	26-28	40-45	Flame retardant, transparent, light-perme- able polyester structure, High non-flamma- bility when used with ATH or Antimony, Excellent fiber wetting, Contains halogen.	CTP applications, RTM applications , Cold press applications, Office partition materials.	ISO- HET Acid-based, low reactivity, low viscosity, transparent flame retard- ant unsaturated polyester resin.
PRE-1620FRH-T Flame Retardant Thixotropic Halogened Clear Polyester	400-500	15-17	40-45	High limit oxygen index value, Transparent structure without filling, high light trans- mittance, Excellent fiber wetting, Contains halogen.	CTP applications, Lighting elements, Roof cover materials, Office partition materials.	HET Acid-based, low reactivity, low viscosity, thixotropic flame retardant unsaturated polyester resin.
PRE-1630FRHI-T Flame Retardant Halogened Thixotropic Clear Polyester	400- 500	15-17	40-45	Flame retardant,transparent, light-permeable polyester structure,High non-flammability when used with ATH or Antimony, Excellent fiber wetting, Contains halogen.	Cold press applications, Office partition	Iso- HET Acid-based, low reactivity, low viscosity, thixotropic flame retard- ant unsaturated polyester resin.
PRE-1640FRH-DT Flame Retardant Halogened Thixotropic Filled Polyester	1500- 2000	19- 22	40-45	High flame resistance , Thixotropic and filled formula that does not flow from vertical surface, Low volumetric shrinkage, Contains halogen, It is BS-476 Part 7 class 1 certified.	CTP applications, Prefabricated residential and office furniture production, Modular cabin, Marine boats and engine equipment production.	HET Acid based, low reactivity, low viscosity, thixotropic, filled flame retardant unsaturated polyester resin.
PRE-1650FR-DTA Flame Retardant Halogen Free Thixotropic Filled Polyester	1200-1500	14-16	45-50	Halogen free formula, Fast molding time, Special formula that does not crash, High flame resistance , Thixotropic, It is UL-94 V0 certified.	CTP applications, Composite material pro- duction, Hand Lay-up, Spray-up, Insulation Material, Prefabricated housing.	Orthophthalic based, low reactivity, medium viscosity, filled, thixotropic, pre-accelerated, halogen free flame retardant unsaturated polyester resin.
PRE-1651FR-DTA Flame Retardant Halogen Free Thixotropic Filled Resin	1200-1500	14-16	45-50	Halogen free formula, Fast molding time, Special formula that does not crash, High flame resistance, Thixotropic.	CTP applications, Composite material production, Production of interior cabin parts that require fire resistance in the automotive and boat industry.	Orthophthalic based, low reactivity, medium viscosity, filled, thixotropic, pre-accelerated, halogen free flame retardant unsaturated polyester resin.
PRE-1652FR-DTA DCPD Based Flame Retardant Halogen Free Thixotropic Filled Polyester	2000-2500	19-21	40-45	Halogen free formula, Fast molding time, Special formula that does not crash, High flame resistance, Thixotropic.	CTP applications , Composite material production , Hand Lay-up, Spray-up, Insulation Material, Prefabricated housing, Modular cabin production.	DCPD based, low reactivity, hight viscosity, filled, thixotropic, pre-accel- erated, halogen free flame retardant unsaturated polyester resin.
PRE-1653FR-DTA Flame Retardant Halogen Free Thixotropic Filled Polyester Resin	1200-1500	14 - 16	45-50	Halogen free formula, Fast molding time, Special formula that does not crash, High flame resistance, Thixotropic.	CTP applications, Composite material pro- duction, Hand Lay-up, Spray-up, Insulation Material, Prefabricated housing, Modular cabin production, Production of interior cabin parts that require fire resistance in the automotive and boat industry.	Orthophthalic based, low reactivity, medium viscosity, filled, thixotropic, pre-accelerated, halogen free flame retardant unsaturated polyester resin.
PRE-1660FR-DTA Flame Retardant Halogened Thixotropic Filled Polyester	1600-1800	12-14	40-45	Flame-proof special formula, Filled struc- ture, Fast and easy fiber wetting, Contains halogen.	CTP applications, Composite material production, Hand Lay-up, Spray-up, Construction of electrical cabinets and switchgear.	Orthophthalic based, low reactivity, medium viscosity, filled, thixotropic, accelerated, hologened flame retardant unsaturated polyester resin.



# **Special Resins**

Special resin products include Tooling-Mold making, saturated, gelcoat base, button and flexible resins

#### Meets advanced production processes

Next to generic and standard resin systems, Polres offers a wide range of special resin system that would fulfil specific requirements

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-01TA Tooling-Mold Making Polyester Resin	300-550	5-8	40-50	Low volumetric shrinkage, Low viscosity for fast wet out, Fast Hardness Development, Corrosion Resistance, Excellent Physical Strengths.	This resin is ideal for general purpose part fabrication and for building low costmolds due to its high durability and strength.	Orthophthalic based, medium reactivity, medium viscosity, thixotropic and pre- accelerated resin.
PRE-02TA Chemical Resistant Tooling-Mold Making Polyester	800-1000	25-35	45-50	Low volumetric shrinkage, Low viscosity for fast wet out, Fast Hardness Development, Corrosion Resistance, Excellent Physical Strengths, Thixotropic property that pre- vents the flow on vertical surfaces.	In mold making where chemical resistance is required.	Isophthalic based, medium-high reac- tivity, medium viscosity, thixotropic and pre- accelerated resin.
PRE-2001 Saturated Polyester Resin	2500-3500	-	-	Monomer free, High wetting power, Light colored, Medium viscosity.	Used in the production of pigment paste.	Saturated polyester resin
PRE-2002 Saturated Polyester Resin	2000- 2400	-	-	Monomer free, High wetting power, Light colored, Flexible, Brigh, Hight viscosity.	Used in the production of pigment paste	Saturated polyester resin
PRE-2003 Saturated Polyester Resin	1500- 3500	-	-	Monomer free, High wetting power, It is bright and light colored, Medium viscosity.	Used in the production of pigment paste	Saturated polyester resin
PRE-2005 Saturated Polyester Resin	250-300	-	-	Monomer free, High wetting power, It is bright and light colored, Low viscosity.	Used in the production of pigment paste	Saturated polyester resin
PRE-3000 General Purpose Voc Free Polyester	1000-1100	13-15	40-45	Styren free, Low volumetric shrinkage, High fill removal, Good fiber soaking and easy application.	Large composite part production by hand lay-up and fiber spray method, Automotive parts, boat, yacht, artificial marble, jewelry and accessories production.	Orthophthalic based, low reactivity, medium viscosity styrene free unsatu- rated polyester resin.
PRE- 4000 Ortho Base Gelcoat Resin	580-700	10-12	40-45	Used in general purpose applications, Recommended for indoor use, Its mechanical performance is high.	Base resin for manufacturing gelcoats.	Ortho based, high reactivity, medium viscosity, unsaturated polyester resin.
PRE- 4001 Flexible Polyester Gelcoat Resin	200-300	8-12	40-45	Used in general purpose applications, Recommended for indoor use, It's mechanical performance is high, Excellent filler wet-out, Low viscosity for high filler loading.	Base resin for manufacturing gelcoats.	Ortho based, medium reactivity and medium viscosity flexible unsaturated polyester resin.
PRE-4002 Iso Polyesster Gelcoat Base Resin	1100-1400	9-14	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gelcoats, Fila- ment winding, Pultruzion, Press molding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE-4003 Iso Polyester Gelcoat Base Resin	850-1050	5-7	40-45	Chemical resistant suitable for sanitary ware, High resistant to cracking and crazing, High elogation, High flexural strength.	Base resin manufacturing gelcoats, Filament winding, Pultruzion Press molding.	Isophthalic based, high viscosity, medium reactivity, resillient unsaturated polyester resin.
PRE- 4010 Ortho Base Gelcoat Resin	500-700	9-10	40-45	Used in general purpose applications, Recommended for indoor use, Its mechanical performance is high.	Base resin for manufacturing gelcoats.	Ortho based, high reactivity, medium viscosity, unsaturated polyester resin





#### Flexible Resins - Resin For Gelcoat - Resin For

#### **Pigment Paste**

Special resin products include Tooling-Mold making, saturated, gelcoat base, button and flexible resins Excellent flexible toughness Control reaction time with accelerator High tear strength and excellent abrasion resistance Precise composition High bonding properties High-temperature durability

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-4014 Gelcoat Base Resin ISO/NPG	700-800	7-8	40-45	High chemical and atmospheric weathering resistance, Good mechanical properties, Food contact Adhesion/ compatibility with hard PVC, High hydrolytic stability, Exceptional electrical properties (break down voltage).	Base resin for manufacturing gelcoats.	ISO/NPG based, high reactivity, high viscosity, unsaturated polyester resin.
PRE-4017 Gelcoat Base Resin ISO/NPG	1000-1200	5-7	45-50	High chemical and atmospheric weathering resistance, Good mechanical properties, Food contact Adhesion/ compatibility with hard PVC, High hydrolytic stability, Exceptional electrical properties (break down voltage).	Base resin for manufacturing gelcoats.	ISO/NPG based, high reactivity, high viscosity, unsaturated polyester resin.
PRE-8000 Polyester Filling And Primer Resin	1300-1600	6-8	37-40	Air dry, Easy sanding, High fill removal.	It is used in the production of Polyester Filler and Polyester Primer.	Orthophthalic based, high reactivity, high viscosity, medium air drying unsaturated polyester resin.
PRE-8001 Polyester Filling And Primer Resin	1500-1800	6-9	37-40	Air dry, Easy sanding, High fill removal.	It is used in the production of Polyester Filler and Polyester Primer.	Orthophthalic based, high reactivity, high viscosity, hight air drying unsaturated polyester resin.
PRE-54 Button Type Polyester Resiin	1200-1300	3-5	40-45	With very clear / transparent product, Compatible with pearlescent colors and pigment pastes, Free of heavy metals and phthalates.	Specially designed for button casting by centrifugal molding.	Orthophthalic based, medium reactivity, medium viscosity, light bluish colored un- saturated polyester resin.
PRE-54T Button Type Polyester Resin	1250-1450	6-8	40-45	Good performance in different colors and effects, Resistant to breakage and cracking, Easy to paint, Workability, Not contains any heavy metal.	Rod pouring button resin.	Orthophthalic based, thixotropic, medium reactivity, high viscosity, high transparent polyester resin.
PRE-55T Button Type Polyester Resin	1450-1550	8-8'30"	40-45	Good performance in different colors and effects, Resistant to breakage and cracking, Easy to paint, Workability, Not contains any heavy metal.	Rod pouring button resin.	Orthophthalic based, thixotropic, medium reactivity, high viscosity, high transparent polyester resin.
PRE-56 Button Type Polyester Resin	900-1000	3-5	40-45	With very clear / transparent product, Compatible with pearlescent colors and pigment pastes, Free of heavy metals and phthalates.	Specially designed for button casting by centrifugal molding.	Orthophthalic based, medium reactivity, medium viscosity, light bluish colored un- saturated polyester resin.
PRE-56T Button Type Polyester Resin	1200-1400	5-7	40-45	Good performance in different colors and effects, Resistant to breakage and cracking,Easy to paint, Workability, Not contains any heavy metal.	Rod pouring button resin.	Orthophthalic based, thixotropic, medium reactivity, high viscosity, high transparent polyester resin.
PRE-89 Flexible Polyester Resin	300-350	10-15	-	High mechanical properties, Flexible, Low volumetric shrinkage, High cracking resistance.	Used to increase the flexibility properties of polyes- ter resins.	Orthophthalic based, low reactivity, low viscosity, unsaturated polyester resin.
PRE-90 Flexible Type Polyester Resin	300-350	10-15	-	High mechanical properties, Flexible, Low volumetric shrinkage, High cracking resistance.	Used to increase the flexibility properties of polyes-ter resins.	Isophtalic based, low reactivity, low viscosity, unsaturated polyester resin.





# **General Purpose**

#### GELCOATS

High end marine applications from high performance speed boats to luxury yachts. By coating the outer surfaces of composite parts, they provide a smooth, bright and vivid look. They increase the resistance against chemicals, atmospheric conditions and impacts.



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-300 General Purpose Gelcoat	Spray 3000-4000 Brush 5000-8000	6-9	42-44	Ideal for industrial applications, Good sag and wrinkling resistance, Physical resistance, Economic.	GRP part production, It is used in contain- ers and interior decoration materials where yellowing and matting is not important, Automotive industry.	Ortho based, pre-accelerated, medium reactivity, thixotropic, transparent gelcoat.
PRE-340 General Purpose Gelcoat	Spray 1300-1900 brush 5000-7000	7-14	43-45	Ideal for industrial applications, Good sag and wrinkling resistance, Physical resistance, Economic.	GRP part production, It is used in contain- ers and interior decoration materials where yellowing and matting is not important, Automotive industry.	Ortho based, pre-accelerated, high reactivity, thix-otropic, transparent gelcoat.
PRE-350 General Purpose Gelcoat	Spray 1400-2200 Brush 5000-7000	10-17	48-50	Contains UV Absorbent, Sagging, wrinkling and yellowing resistance is good, High physical and mechanical resistance.	GRP part production, Container and house interior decoration materials production, Kitchen counter and sink production.	Orthophtalic based, pre-accelerated, medium- high reactivity, thixotropic gelcoat.

# Performance

RESIN NAME	VISCOSITY (CPS)			FEATURES	APPLICATION
PRE-365 Performance Gelcoat	Spray 1300-2500 Brush 5000-8000	10-14	42-45	High UV resistance, High atmospheric resistance, Good sag and wrinkle resistance, High chemical resistance, Bright and smooth surfaces are obtained, Good pigmentability.	Automotive, Construction industry, Chemical storage tanks production.
PRE-370 Performance Gelcoat	Spray 1300-1900 Brush 5000-7000	10-15	43-45	Contains UV Absorbent, Good sag and wrinkling resistance, Physical resistance, Gives glossy surfaces good pigmentability, Low yellowing and matting rate.	Kitchen counter and sink construction, Chemical storage tanks and equipment production, Automotive and marine industry.

#### DESCRIPTION

Isophthalic based, medium-high reactive, thixotropic and pre-accelerated performance gelcoat.

Ortho/NPG based, pre-accelerated, high reactivity, thixotropic, performance gelcoat.



#### **High Performance Gelcoats**

High performance and excellent quality compared to other gel coats on the market.

#### High resistance products

Provides UV and scratch resistance, minimal gloss fading and thermal shock resistance

# Marine and High Performance

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-380 High Performance Gelcoat	Spray 1300-1900 Brush 5000-7000	10-20	47-50	Contains UV Absorbent, Good sag and wrinkling resistance, It has high chemical, physical and heat resistance, Gives glossy surfaces, good pigmentability, Pigment dispersion is good,Low yellowing&matting rate.	Kitchen counter and sink construction, Chemical storage tanks and equipment pro- duction, Equipment construction in the food industry, Automotive and marine industry.	Isophthalic/NPG based, pre-accelerated, acrylic modified, high reactivity, thixotropic for spray and brush applications high performance gelcoat.
PRE-385 High Performance Marıne Gelcoat	Spray 1400-2200 Brush 5000-7000	10-17	48-50	Contains UV Absorbent, High resistance to sea water and atmospheric conditions, High impact and surface abrasion resistance, Good sag and wrinkling resistance, It has high chemical, physical and heat resistance, Gives glossy surfaces, good pigmentability, Pigment Dispersion is good. Low yellowing and matting rate.	It is designed especially for marine industry.	ISO/NPG based, high ISO/NPG and acrylic modi- fied ratio, pre-accelerated, high reactivity, thixotropic, high performance marine gelcoat for spray and brush applications.



Gelcoats used in marine applications must be extremely durable and have excel- lent weather ability properties.

Our marine and high performance range of ISO-NPG gelcoats have been developed to meet these tough requirements.

The advanced formulation will provide boat builders with premium quality and durable finishes that will stand the test of time. These gelcoats are extremely UV and water resistant, have high gloss retention and show excellent resistance to fading.







### Gelcoats

Polres Chemical resistance not effected by most chemicals even at

high temperatures

### High performance swimming pools

High performance chemical resistance and weathering resistance

swimming pools

# **Chemical Resistance**



RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-200 Vınyl Ester Gelcoat	Spray 1500-2000 Brush 5200-6800	SPRAY 18-25 BRUSH 25-28	38-42	High HDT, Due to its bisphenolic structure, it is not affected by many chemicals even at high temperatures, High physical and chemical resistance.	It is used for applications that require the highest level of chemical and high temperature resist- ance, Industrial process equipment, mold produc- tion, anticorrosion surface. It is used for applica- tions that require the highest level of chemical and high temperature resistance.	Bisphenol-A based , pre-accelerated ,high reactivity, thixotropic gelcoat.
PRE-210 High Performance Gelcoat	Spray 1300-1900 Brush 5000-7000	10-14	40-45	Contains UV Absorbent. Good sag and wrinkling resistance. It has high chemical, physical and heat resistance. Gives glossy surfaces, good pigmentability. Pigment Disper- sion is good. Low yellowing and matting rate	Kitchen counter and sink construction. Chem- ical storage tanks and equipment production. Equipment construction in the food industry. Automotive and marine industry.	Isophthalic/NPG based, pre-accelerated, acrylic mod- ified, high reactivity, thixotropic for spray and brush applications high perfor- mance gelcoat

# Mold

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-700 Gelcoat For Mould Production	Spray 3400-4000 Brush 6000-7000	8-10	35-40	It has high styrene resistance, It does not cause frostbite application,It during is resistant to impact, Flexible.	It is designed for the production of mould for polyester products.	Orthophthalic based, pre-accelerated, thixotropic gelcoat.
PRE-701 Performance Mold Production	Spray 3400-4000 Brush 6000-7000	8-10	35-40	It has high styrene resistance, It does not cause frostbite during application, It is resistant to impact, Flexible.	It is designed for the production of molds from which polyester products are made.	It is an isophthalic based, pre-accelerated, thixotropic gelcoat with high chemical and mechanical resistance.
PRE-702 High Performance Mold Making Gelcoat	Spray 1300-1900 Brush 5000-7000	10-14	40-45	Contains UV Absorbent,Good sag and wrinkling resist- ance, It has high chemical, physical and heat resistance, Gives glossy surfaces, good pigmentability. Pigment dis- persion is good, Low yellowing and matting rate.	It is designed for the production of molds where need high chemical resistance.	Isophthalic/NPG based, pre-accelerated, acrylic modified, high reactivity, thixotropic for spray and brush applications high perfor- mance gelcoat.



Polyester gel coats are a type of polyester resin that are commonly used as a surface coating in the composites industry.

## Flame Retardant







RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION		
PRE-160FR-HTAD Flame Retardant Filled Gelcoat	Spray 1800-2400 Brush 5500-8500	6-16	43-45	Filled, thixotropic structure, Halogen high flame resistance, High physical resistance, High chemical resistance.	GRP part production, City furniture, Modular Cabin, Automotive and train parts, Boat industry.	HET acid based, pre-accelerated, medium re- activity, thixotropic, filled flame retardant gelcoat.		
PRE-165FR-TAD Performance Flame Retardant Filled Gelcoat	Spray 2500-3000 Brush 8000-10000		45-50	Filled thixotropic structure, Halogen-free high flame resistance, High physical resistance, Chemical resistance.	GRP part production, City furniture, Modular cabin, Automotive and train parts, Boat industry.	Isophthalic based, pre-accelerated, high reactivity, thixotropic, flame retardant gelcoat.		
PRE-170TAD Flame Retardant Filled Gelcoat	Spray 2500-3000 Brush 8000-10000	6-16	45-46	Filled thixotropic structure, Halogen-free high flame resistance, Good physical resistance.	GRP part production, City furniture, Modular Cabin, Automotive and train parts, Boat industry.	Orthophthalic based, pre-accelerated, high reactivity, thixotropic, flame retardant gelcoat.		

### Sandable

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-175 Sanding Primer Gelcoat	Spray 1600-2200 Brush 6000-12000	7-12	35-40	Easily sanded by hand or with a vibratory sander, It does not cause frostbite during application, Does not crack due to impact and temperature changes, Can be colored.	Automotive industry, For parts to be painted later, In the production of front, rear and ceil-ing panels of buses and trucks, It is used as a primer gelcoat in cabin production and many other parts.	Orthophthalic based, filled, pre-accelerated, thixo- tropic sanding gelcoat.
PRE-176 Sanding Primer Gelcoat	Spray 1600-2200 Brush 6000-12000	7-12	35-40	Easily sanded by hand or with a vibratory sander, It does not cause frostbite during application, Does not crack due to impact and temperature changes, Can be colored, It is high hiding power.	Automotive industry, For parts to be painted slater, In the production of front, rear and ceil- ing panels of buses and trucks, It is used as a primer gelcoat in cabin production and many other parts.	Orthophthalic based, filled, pre-accelerated, thixo- tropic sanding gelcoat.
PRE-177 Sanding Primer Gelcoat	Spray 1600-2200 Brush 6000-12000	7-12	35-40	Easily sanded by hand or with a vibratory sander, It does not cause frostbite during application, Does not crack due to impact and temperature changes, Can be colored, It is high hiding power, but is an economical product.	Automotive industry, For parts to be painted later, In the production of front, rear and ceil- ing panels of buses and trucks, It is used as a primer gelcoat in cabin production and many other parts.	Orthophthalic based, filled, pre-accelerated, thixo- tropic sanding gelcoat.

#### Topcoat

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PRE-180 General Purpose Topcoat Gelcoat	Spray 1400-2200 Brush 5000-7000	10-17	40-50	Contains UV Absorbent, Sagging, wrinkling and yel- lowing resistance is good, High physical and mechanical resistance, Good chemical resistance.	Used In Repair of Grp parts coated with gelcoat.	Orthophtalic based, pre-accelerated, medium- high reactivity, transparent thixotropic topcoat gelcoat.
PRE-185 Performance Topcoat Gelcoat	Spray 1300-2500 Brush 5000-8000	10-14	40-45	High UV resistance, High atmospheric resistance, Good sag and wrinkle resistance, High chemical resistance, Bright and smooth surfaces are obtained, Good pigmentability.	Used In Repair Of Grp parts coated With gelcoat.	Isophthalic based, medium-high reactive, trans- parent, thixotropic and pre-accelerated perfor- mance gelcoat.







# VinylEster Resin

Vinylester resin, on the other hand, is a type of epoxy-based resin between epoxy and polyester. It provides very good resistance against osmosis. It shows similarities in terms of using the same hardeners as polyester in its application.Adhesion and tensile properties are much better than Polyester Lower than Epoxy.

RESIN NAME	VISCOSITY (CPS)	GEL TIME (MIN)	BARCOL	FEATURES	APPLICATION	DESCRIPTION
PVE-01 Vinylester Resin	400-600	7-8	38-42	Resistant to acids, bases, solvents and many chemicals, High corrosion resistance, High heat resistance for a long time, Excellent adhesion property, Low viscosity, Excellent fiber wetting, Excellent mechanical strength and impact resistance, Perfect compatibility with glass fiber and / or carbon fiber.	Production of composite parts that require dynamic and static load resistance, Filament winding, It is used in chemical substance warehou-ses, in the construction of equipment for chemical substan-ce producing facto-ries, in the construction of electrolysis containers, in the production of coating against corrosion, It can be used successfully in all areas that come into contact with water such as hot water transport pipes and solar collectors, boiler tanks, thermal bath equipment, fish breeding pools, large-scale boat construction.	Bisphenol-A / Epoxy resin based, high reactivity, low viscosity, vinily ester resin.
PVE-01TAVinylester Resin	600-800	25-30	38-42	Resistant to acids, bases, solvents and many chemicals, High corrosion resistance, High heat resistance for a long time, Excellent adhesion property, Low viscosity, Excellent fiber wetting, Excellent mechanical strength and impact resist-ance, Perfect compatibility with glass fiber and / or carbon fiber.	Production of composite parts that require dynamic and static load resistance, Filament winding, It is used in chemical substance ware-houses, in the construction of equipment for chemical substance producing facto- ries, in the construction of electrolysis containers, in the production of coating against corrosion, It can be used successfully in all areas that come into contact with water such as hot water transport pipes and solar collectors, boiler tanks, thermal bath equipment, fish breeding pools, large-scale boat construction.	Bisphenol-A / Epoxy resin based, high reactivity, thixotropic low viscosity, accelerated vinyl ester resin.
PVE-011Vinylester Resin	400-600	7-8	38-42	Resistant to acids, bases, solvents and many chemicals, High corrosion resistance, High heat resistance for a long time, Excellent adhesion property Low viscosity, Excellent fiber wetting, Excellent mechanical strength and impact resistance, Perfect compatibility with glass fiber and / or carbon fiber.	Production of composite parts that require dynamic and static load resistance, Filament winding, It is used in chemical substance warehouses, in the construction of equipment for chemical substance producing factories, in the construction of electrolysis containers, in the produc- tion of coating against corrosion, It can be used success- fully in all areas that come into contact with water such as hot water transport pipes and solar collectors, boiler tanks, thermal bath equipment, fish breeding pools, large- scale boat construction.	Bisphenol-A / Epoxy resin based, high reactivity, thixotropic low viscosity, accelerated vinyl ester resin.
PVE-012Vinylester Resin	400-600	7-8	38-42	Resistant to acids, bases, solvents and many chemicals, High corrosion resistance, High heat resistance for a long time, Excellent adhesion property Low viscosity, Excellent fiber wetting, Excellent mechanical strength and impact resistance, Perfect compatibility with glass fiber and / or carbon fiber.	Production of composite parts that require dynamic and static load resistance, Filament windi It is used in chem- ical substance warehouses, in the construction of equip- ment for chemical subs-tance producing factories, in the construction of electrolysis con-tainers, in the production of coating against corrosion, It can be used successfully in all areas that come into contact with water such as hot water transport pipes and solar collectors, boiler tanks, thermal bath equipment, fish breeding pools, large-scale boat construction.	Bisphenol-A / Epoxy resin based, high reactivity, thixotropic low viscosity, vinyl ester resin.



#### **BONDING PASTES**

In the lubrication of composite parts,For closing the holes on composite parts. It can be used for bonding GRP, fixing inserts and also as an aid to laminating. High elasticity and impact resistance.

#### **PBP-900 BONDIGN PASTE WITH GLASS FIBRES**

Orthophthalic based, pre-accelerated, adhesive paste containing glass fiber scraps.

#### **PBP-901 BONDING PASTE WITH GLASS FIBRES**

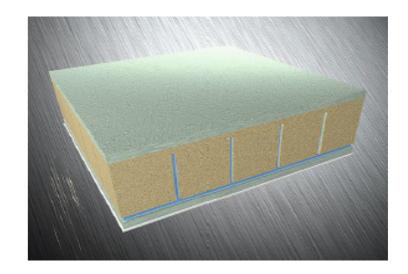
Isophthalic based, pre-accelerated, adhesive paste containing glass fiber scraps.

#### **PFM01-POLYESTER FIBRO MASTIC**

Orthophthalic based, pre-accelerated, filled unsaturated polyester resin with glass fiber scraps.

#### **PFM02-POLYESTER FIBRO MASTIC**

Isophthalic based, pre-accelerated, filled unsaturated polyester resin with glass fiber scraps.





#### POLRES ADDITIVE



#### **PA01-LSA SOLUTION**

Polystyren solution dissolved in styrene.

### **PA02-LSB SOLUTION**

Polyvinyl acetate solution dissolved in styrene.

#### **PA03 PARAFFIN SOLUTION (10 %)**

Paraffin soluntion dissolved in styrene.

## **PA04 PARAFFIN SOLUTION (15%)**

Paraffin soluntion dissolved in styrene.

#### **PA05-ANTIFOAMING ADDITIVE**

It is the solution used to remove the foam formed in the mixture prepared during the application of polyester resins.

#### **PA06-AMIN ACCELERATOR**

It is used where very fast curing is required. Reduces the shelf life of resin. For this, the mixture with amine added during the application should be used in a short time. The recommended usage rate is 0.01-0.1%.

#### **PA07-AMIN ACCELERATOR**

It is used where very fast curing is required. Reduces the shelf life of resin. For this, the mixture with amine added during the application should be used in a short time. The recommended usage rate is 0.05-0.5%.

#### **PA08-INHIBITOR SOLUATION**

It is used to extend the gel time and shelf life of polyester resin. The recommended usage rate is 0.01-0.8%.



# Bulding The **Future** Together!





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