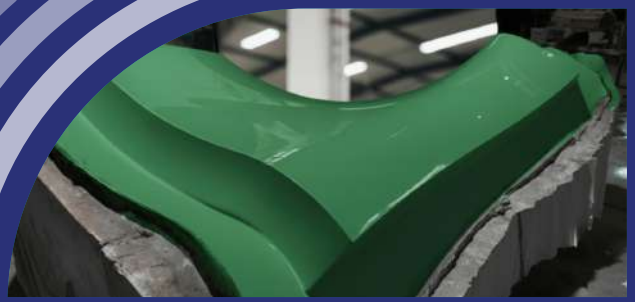
PRODUCT GUIDE | COMPOSITE RESINS & GELCOATS






www.eceboya.com

UNSATURATED POLYESTER & VINYL ESTER RESINS | TOOLING SYSTEMS
GELCOATS | PIGMENT PASTES | AUXILIARY PRODUCTS

CONTENTS

Modern Production Facilities
Kocaeli GEBKİM 49,000 m²

30,000 Tons/Per Year
Production Capacity

R&D Center
Since June 2017

Export to more than
30 countries

Full Automation

Sustainable Quality

ABOUT US

Erco is a **leading manufacturer** of polyester and vinyl ester resins, gelcoats, and specialty materials for the composites industry. Combining **advanced manufacturing** capabilities with scientific expertise, we deliver consistent quality, reliable service, and innovative solutions that meet today's needs and shape tomorrow's technologies.

Founded in 1982, Ece Boya Kimya has become one of Türkiye's leading manufacturers in coatings and resin production with its well-established brand, Erco. Our growth is driven by continuous R&D, enabling us to develop new technologies, anticipate market demands, and provide value-added solutions to customers **worldwide.**

We manufacture **high-performance** resins, gelcoats, and pigment pastes, serving diverse composite industry segments with long-lasting quality and dependable performance. Operating from our modern 49,000 m² production facility in Gebkim and supported by an **experienced expert team**, we have built a strong reputation as a reliable global partner.

Guided by science, technology, and sustainability, we ensure consistent product quality through advanced production systems, strict quality standards, and **international certifications.**

Our mission is simple: to provide the right products with outstanding service and continuously invest in innovation to deliver the best solutions for our customers.

Unsaturated Polyester Resins

Erco is a well-established brand with more than 40 years of experience in the composites industry, providing high-quality and innovative unsaturated polyester resin solutions. With its broad product portfolio, Erco offers resins tailored to different processes and applications, enabling customers to achieve superior product quality. Our products are used in more than 30 countries and consistently deliver high performance even under challenging climate and operating conditions.

At Ece Boya Kimya, our goal is not only to supply products but also to develop the most suitable solutions together with our customers. Our technical team designs customized resins for each production line, ensuring process optimization, improved quality, and sustainable performance. With its innovative technology, strong technical support, and customer-centric design approach, Erco is an essential business partner for composite manufacturers.

Product Code	Chemical Nature	Explanation	HDT(°C) (ISO 75B)	Area of Use
E02	Ortho	Casting, Rigid	72	Sanitary ware, Decorative items
E06	Ortho	General purpose casting	49	Countertops, Sinks, Giftware, etc.
E07	Ortho	Laminating, Lloyds Register	75	Automotive, Panels and Containers
E07 FR	Ortho	Laminating, Halogen-free flame retardant, UL94 V0 and BS 476 CLASS 2	65	Flame retardant composite
E07 TA	Ortho	Laminating, Accelerated, Thixotropic, Lloyds Register	70	Automotive, Marine and Structures
E07 TNAB	Ortho	Laminating, Accelerated, Thixotropic, Non-paraffin, Lloyds Register	70	Automotive, Marine and Structures
E11	Ortho	General purpose laminating	52	Panels, Containers
E14	Ortho	Grade A laminating	70	Pools, Buses, Structures
E15	Ortho	High performance casting, Low volumetric shinkage	70	Sinks, Sanitary ware
E16	DCPD	Laminating, High HDT, High impact resistance	72	Automotive, Structures
E19	Ortho	Acrylic backing spray	50	Acrylic bathtub and shower tray
E22	Ortho	Buttons, Centrifugal casting	40	Transparent decorative applications, Button
E24 T	Ortho	Buttons, Rod casting	40	Button
E26	Ortho	Buttons, Transparent, Centrifugal casting	45	Button
E27	Ortho	Flexible, Transparent, Laminating	43	Button
E30	DCPD	Adhesive and putty	61	Putty, Adhesive
E33	Ortho	DCPD-free, High shelf life, Grade A putty	33	Putty
E34	Ortho	Marble adhesive, Rigid	100	Adhesive
E36	DCPD	Putty, Rigid	56	Putty
E37	DCPD	Putty, Flexible	40	Putty
E38	DCPD	Marble adhesive, Flexible	45	Adhesive
E40	Ortho/NPG	Gelcoat base	60	General purpose gelcoat

Product Code	Chemical Nature	Explanation	HDT(°C) (ISO 75B)	Area of Use
E41	Ortho	Gelcoat base	61	General purpose gelcoat
E43	ISO/NPG	Automated casting, Low reactivity	60	Kitchen countertops, sinks, etc.
E44	ISO/NPG	Automated casting, Medium reactivity	77	Countertops, Sinks, Slabs
E45	ISO/NPG	Gelcoat base	85	High-resistance gelcoat applications
E47	ISO/NPG	Gelcoat base	95	Harsh environment gelcoat applications
E50 STMA	DCPD	High-strength PS foam laminating	50	Architectural structures
E51	DCPD	RTM, Flexible	50	Automotive, Marine, Industrial parts
E54	Ortho	RTM, Rigid	58	Composite structural components
E59	Iso	Grade A RTM	110	Outdoor equipment housings
E62	Iso	Pultrusion, Rigid	90	Profiles and poles
E63	Iso	Grade A Pultrusion	70	Poles
E63 FR	Iso	Pultrusion, Halogen-free flame retardant	62	Flame retardant profiles
E64	Ortho	Continuous lamination	60	Corrugated sheets
E65	rPET	Recycled PET-based, Pultrusion	52	Resistant profiles
E67	Iso	Chemical resistant pultrusion	60	Resistant profiles
E68	Ortho	General purpose pultrusion	60	Poles
E74	Iso	Chemical resistant laminating, Lloyds Register	75	Water storage tanks, Chemical resistant applications
E74 TA	Iso	Chemical resistant laminating, Accelerated, Thixotropic, Lloyds Register	70	Automotive, Marine and Container manufacturing
E75	Iso	Gelcoat base, Lloyds Register	75	Performance gelcoat applications
E80	DCPD	Paraffin-free, Fast air-dry, Laminating	95	Wood and other coatings
E82	Ortho/Allylic	Allylic modified, Fast air-dry	75	Wood and other coatings
E90	Ortho	High reactivity SMC	130	Automotive, Machinery, Electrical boxes, etc.
E91	Ortho	General purpose SMC/BMC	112	Machinery parts, Electrical enclosure systems
E92	Iso	Chemical resistant SMC	120	Chemical resistant SMC/BMC
E93	Iso/NPG	Chemical resistant SMC	109	Harsh environment SMC, Boiling water resistant glossy parts
E96	Maleic	Pure Maleic SMC, Class A	145	Class A surface SMC
F02	Ortho	VOC-free, Casting		Sanitary ware, Decorative items
F03	DCPD	VOC-free, Putty		Putty, Adhesive
F04	Iso/NPG	VOC-free, Laminating		Countertops, Sinks, Slabs
E651	-	Pigment paste, High viscosity, Solvent and styrene-free		Used in the production of pigment paste
E652	-	Pigment paste, Low viscosity, Solvent and styrene-free		Used in the production of pigment paste
E658	-	Pigment paste, Styrene-free		Used in the production of pigment paste
E670	-	Low Profile Additive (Saturated polyester)		Used as a volume-reducing additive
D01	-	Low Profile Additive (PMMA)		Improved surface quality with prevented shrinking in SMC
D13	-	Low Profile Additive (PVAc)		Improved surface quality with prevented shrinking in SMC
D21	-	Low Shrink Additive(PS)		Improved surface quality with reduced shrinking in SMC/BMC

Vinyl Ester Resins

Vinyl ester resins exhibit excellent chemical resistance against many aggressive chemicals, including acids, bases, and solvents, thanks to their molecular structure and the functional groups they contain. In addition, they provide high mechanical strength, impact resistance, and structural stability. They also offer strong adhesion and compatibility with reinforcements such as glass fiber and carbon fiber.

These resins have high HDT values and are able to maintain their mechanical properties at higher temperatures compared to standard polyester resins.

Vinyl ester resins are widely used in the production of structural composite components that require corrosion resistance and high mechanical performance, including marine applications, wind turbine blades, automotive parts, barrier layers for pools and water slides, and aerospace structures.

Product Code	Chemical Nature	Explanation	HDT(°C) (ISO 75B)	Area of Use
V75	BPA VE	Laminating	100	Marine, Energy, Heavy-duty parts
V75 TA	BPA VE	Laminating, Thixotropic, Accelerated	90	Industrial composite components
V76	BPA VE	Amine promoted	100	Putty and adhesives
V77	BPA VEU/DCPD	DCPD modified BPA epoxy-based	105	Fast curing, durable parts
V77 TA	BPA VEU/DCPD	DCPD modified BPA epoxy-based, Thixotropic, Accelerated	105	Fast curing industrial composite components
V78	BPA VEU	Laminating	120	High impact and chemical resistant parts
V85	Novolac VE	Laminating	130	High chemical (acid & alkali) resistant applications
V90	BPA VEU	SMC-ready	120	Impact resistant SMC composites

Tooling Systems

Ece Boya provides reliable composite materials designed to support consistent and efficient tooling production. With extensive manufacturing experience and continuous research and development, the company focuses on durable, practical, and performance-oriented gelcoat and resin technologies for the composites industry.

Tooling gelcoats, skincoats, and specialty resins deliver smooth surface quality, dimensional stability, and dependable heat resistance under demanding conditions. Anti-static and high-durability brush and spray gelcoats enable safe and uniform application, while low-shrink and fast-curing resins help improve mold precision and reduce processing time.

The G90, G91, G95, and G96 series, together with V90 TA, E46-27, and E03, provide stable and efficient solutions for a wide range of tooling applications.

Product Code	Chemical Nature	Explanation	HDT(°C) (ISO 75B)	Area of Use
G90	VEU	Anti-static high-durability tooling brush gelcoat with various colors	105	High performance safe tooling gelcoat with 104 Ω/m2
G91	VEU	Anti-static high-durability tooling spray gelcoat with various colors	105	High performance safe tooling gelcoat with 104 Ω/m2
G95	VEU	High-durability tooling brush gelcoat with excellent dimensional stability	105	High performance tooling gelcoat with 104 Ω/m2
G96	VEU	High-durability tooling spray gelcoat with excellent dimensional stability	105	High performance tooling gelcoat with 104 Ω/m2
G29	ISO/NPG	Tooling brush gelcoat	85	Tooling parts with lower stress and use
V90 TA	VEU	Tooling skincoat	115	High quality tools with excellent surface properties
E46 A	ISO/NPG	Zero shrinking tooling resin	55	Excellent dimensional stability tools with zero shrinking, fast wet-on-wet application
E03 TA	Ortho	Tooling resin	70	General purpose tooling with lower stress and use

Gelcoats

Erco offers gelcoats developed specifically for composite applications, backed by many years of gelcoat manufacturing experience and extensive know-how gained from field applications. Our gelcoats are formulated to meet demanding service conditions required such as high UV resistance, chemical durability, and mechanical strength. Product performance is optimized in line with customer requirements and validated through comprehensive testing at our application center, ensuring long service life for composite parts.

Gelcoats provide excellent resistance against aggressive chemicals, impacts, and abrasion while maintaining surface integrity. Impact and scratch resistance are verified through standardized tests, as well as accelerated aging and UV exposure tests confirm long-term gloss retention, color stability, and overall surface appearance. This approach guarantees both lasting aesthetics and reliable functional performance.

Gelcoats from the factory can be supplied in clear or pre-pigmented forms, with color matching available on RAL, Pantone, NCS, BS and other international color standards, or customer samples. For low-volume or quick colored gelcoat inquiries, Coatint coloring system enables small batch production within minutes from our official distribution points.

Product Code	Chemical Nature	Explanation	Remarks	HDT(°C) (ISO 75B)	Area of Use
G10	ISO	External use with high UV resistance, Lloyd's Register	Brush	65	Impact and UV resistant surfaces with good hydrolysis and chemical resistance
G11	ISO	External use with high UV resistance, Lloyd's Register	Spray	65	Impact and UV resistant surfaces with good hydrolysis and chemical resistance
G11-60	ISO	Matt topcoat for external use with high UV resistance, Lloyd's Register	Spray	60	General topcoat applications, part repairs and aesthetic finishes
G18	ISO	Anti-static gelcoat for external use	Brush	65	Outdoor composite parts with anti-static property, preventing accidents caused by static electricity with 104 Ω/m2
G18	ISO	Anti-static gelcoat for external use	Spray	65	Outdoor composite parts with anti-static property, preventing accidents caused by static electricity with 104 Ω/m2
G20	ISO/NPG/Acrylic	High chemical resistance	Brush	85	Sinks, countertops, various composite parts for harsh environments
G21	ISO/NPG/Acrylic	High chemical resistance	Spray	85	Sinks, countertops, various composite parts for harsh environments
G21-60	ISO/NPG/Acrylic	Topcoat for high chemical resistance	Spray	85	Various composite parts for harsh environments, parts reparis and aesthetic finishes
G25	ISO/NPG/Acrylic	Superior weathering high performance gelcoat	Brush	90	High-performance composite applications, wind turbine blades and component manufacturing
G26	ISO/NPG/Acrylic	Superior weathering high performance gelcoat	Spray	90	High-performance composite applications, wind turbine blades and component manufacturing

Product Code	Chemical Nature	Explanation	Remarks	HDT(°C) (ISO 75B)	Area of Use
G30	Ortho	General purpose gelcoat with UV resistance	Brush	50	Machine parts and technical components
G31	Ortho	General purpose gelcoat with UV resistance	Spray	50	Machine parts and technical components
G38	Ortho/NPG/Acrylic	Glossy hydrolytic-resistant gelcoat with UV resistance	Brush	50	Durable industrial applications, Protective composite components
G39	Ortho/NPG/Acrylic	Glossy hydrolytic-resistant gelcoat with UV resistance	Spray	50	Durable industrial applications, Protective composite components
G40	Ortho	General purpose gelcoat	Brush	65	Interior parts with optimal properties
G50	Ortho	Sanding gelcoat with great flexibility	Brush	55	GRP parts to be painted after sanding
G51	Ortho	Sanding gelcoat with great flexibility	Spray	55	GRP parts to be painted after sanding
G61-60	Ortho/Allylic	Glossy topcoat for external use with high UV resistance	Spray	60	Glossy finish with direct application on GRP part without polishing
G70	VE	Chemical resistant and tooling gelcoat	Brush	90	Mould production, tooling and chemical resistant applications
G71	VE	Chemical resistant and tooling gelcoat	Spray	90	Mould production, tooling and chemical resistant applications
G72	VE/DCPD	Flexible barriercoat with excellent surface properties	Brush	100	High hydrolysis, blister and chemical resistant composite parts, pools and boats
G73	VE/DCPD	Flexible barriercoat with excellent surface properties	Spray	100	High hydrolysis, blister and chemical resistant composite parts, pools and boats

Pigment Pastes

Formulated polyester pigment pastes ensure consistent coloration, long shelf life, and excellent compatibility across composite systems.

Product Code	Chemical Nature	Product Code
C30-XX-XXXX	Standard pigment paste	"Used for colouring gelcoats and resins. Recommended amount: Resin: 1-5% Gelcoat: 8-15%"
C35-XX-XXXX	Low viscosity pigment paste	
C3X-14-XXXX	UV-resistant pigment paste	

xxxx: Ral code

Auxiliary Products

The performance of unsaturated polyester resins depends on precise control of curing speed, processability, and final mechanical properties. To achieve consistent and reliable results, a combination of accelerators, initiators, monomers, reinforcements, and performance-enhancing additives are used. These components play critical roles in optimizing production efficiency, ensuring stable processing conditions, and delivering durable, high-quality composite parts.

Accelerators are typically metal salts or amine-based compounds that promote free radical polymerization and enable better control and optimization of reaction and curing times. Initiators generate free radicals that trigger the curing reaction by activating the double bonds in the resin. MEKP, AAP, TBPB, and BPO are among the most used initiators, while a wide range of alternatives is available in our portfolio under the NOROX brand.

Monomers are used to reduce viscosity and improve processability; styrene is the most common, although excessive use may negatively affect mechanical and chemical resistance. Reactive diluents such as AMS, VT, or divinyl benzene can be utilized for specific performance requirements, while acrylic and methacrylic monomers may be preferred for advanced composite applications.

Glass fiber, along with carbon, basalt, and natural fibers, serves as the primary reinforcement to enhance the mechanical strength of composites.
In addition, our portfolio includes specialty additives designed to further improve processing characteristics and overall product performance.
Polyester cleaners are used for the effective removal of resin residues after process.

Accelerators	
Cobalt accelerators	**Cobalt Content (%)**
Y00-50	0,5
Y01-00	1
Y03-00	3
Y06-00	6
Transparent accelerators	
Cobalt accelerators	**Type**
Y01-18	Slow
Y02-18	Fast
Y03-18	Very Fast
Other Auxiliary Products	
T10-00-0000	Styrene Monomer
T12-00-0000	Polyester Cleaner

Solution Code	Explanation
D02	Defoamer
D04	Polymerization promoter
D05	Paraffin wax solutions
D06	Polyester brightener solutions
D07	Gel timer retarder
D11	Amine accelerator
D15	Putty stabilizer
D16	Anti scratch additive
D17	Shelf life exterder
D18	UV resistance enchancer solutions
D19	Topcoat additive solutions
D21	Dispersion solution
D22	Conductive additive

coatint

Precise and intelligent coloring with unlimited and instant results.

IN PARTNERSHIP WITH

FAST & FLUID | VIBRANTZ TECHNOLOGIES™

SZUTEST
ISO 9001 & ISO 45001
QUALITY MANAGEMENT SYSTEM
OCCUPATIONAL HEALTH AND
SAFETY MANAGEMENT SYSTEM

Lloyd's Register

Ece Boya Kimya San. ve Tic. A.Ş.
Gebkim Kimya İhtisas OSB, İbrahim Aracı Cad.
No: 1-2 Dilovası / Kocaeli - TÜRKİYE

+90 (262) 644 45 44
+90 (262) 644 45 40
www.eceboya.com

Ercoturkiye
Ece Boya Kimya
Erco Ece Boya Kimya