Celanese

The chemistry inside innovation™

CELANESE EMULSIONS FOR USE IN INDUSTRIAL ADHESIVES

PAPER PACKAGING, CONVERTING ADHESIVES & WOOD ADHESIVES

PRODUCT PORTFOLIO AMERICAS 2025/2026

Formulating your vision with our expertise

The company

We are a global technology and specialty materials company based in Dallas, Texas, operating in key geographic locations worldwide.

We are continuously working on innovation and process improvement and are always looking for exciting new opportunities. In all the industries we serve, our products hold leading positions worldwide. We offer an advanced product portfolio complemented by large global production capacity, operating efficiencies, proprietary production technology and competitive cost structures.

Our two business segments

- Acetyl Chain: acetic acid, vinyl acetate monomer, other acetyl derivatives, EVA polymers, emulsions polymers, redispersible polymer powders, specialty additives and cellulose acetate and derivatives
- Engineered Materials: specialty thermoplastics and food ingredients

Celanese Emulsion Polymers business

- Partnering with our customers to fulfill real industry and consumer needs
- Global expertise in its wide array of applications
- Manufacturer of both high-pressure (VAE) and conventional (atmospheric, ATM) dispersions

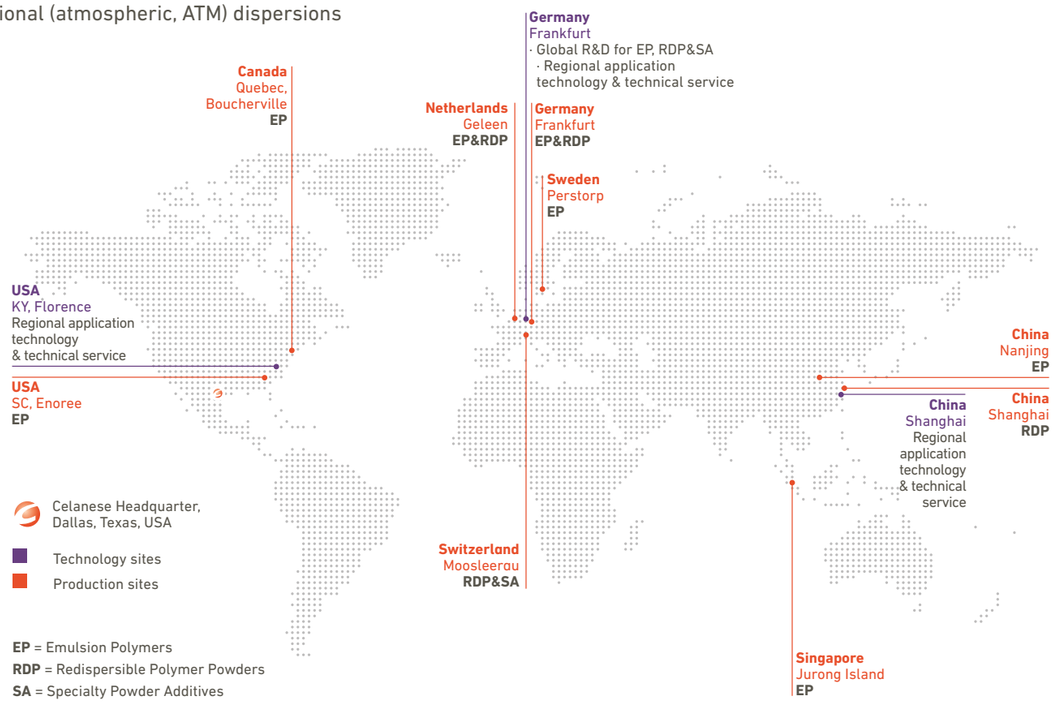
Celanese Emulsion Polymers is one of the largest and most experienced suppliers of emulsions technology for waterborne adhesives in the world. We have been an active leader in adhesives for decades, and we have gained deep understanding of the markets, products, applications and issues affecting our industry today.

Understanding customer and industry needs

The Celanese technical team consistently strives to meet the needs of our customers, including their formulated adhesive products. We are constantly updating our laboratory with modern equipment to aid us in designing and adapting our products to meet real-world application profiles to enable product testing according to the latest standards and norms.

Global reach

The global research and development center for Celanese emulsions is located in Germany. The center closely cooperates with the other Celanese regional application development centers in the USA, and in China. These regional facilities enable us to rapidly develop new products and assist customers in the region with their development projects. We have manufacturing plants and technical support in all major regions.



Celanese Emulsions for Adhesives

Adhesive solutions

Globally, adhesives are Celanese's largest market for polymer emulsion applications. We have an experienced technical service team that understands well the needs of the American adhesives market and offers a wide range of emulsions. We are able to provide on-site technical support. By optimizing Celanese emulsions, the formulated adhesives can run smoothly and efficiently with optimal coating weights, reduced downtime for cleaning and increased production speed to meet the daily demands of the industry.

Celanese offers the following adhesive solutions:

- Paper packaging
- Converting applications
- Woodworking

Emulsions for packaging and converting adhesives

We offer a portfolio of emulsion products for paper packaging and converting applications designed to meet our customers' needs. Comprising both PVAc and VAE technologies, our portfolio includes polymers designed for remoistenable applications (Resyn® 1072), heat sealing (Resyn® 1601), and for formulations designed for fast setting, excellent adhesion and strength (Dur-O-Set® E-150, Dur-O-Set® E-352).

Our Flexbond® series of low Tg polymers offers a variety of performance attributes making these emulsions ideal for specialty packaging applications. These include lamination, high-moisture packaging applications, adhesion promotion, as well as applications requiring moderate pressure sensitive adhesion properties.

Emulsions for woodworking

We recognize that our customers' needs in the woodworking space are varied. Our portfolio features multiple products that meet Type II and European D3 specifications, along with polymers exhibiting excellent adhesion to a variety of porous and cellulosic substrates.

Product overview

Paper & Packaging emulsions

	Typical values							Applications					
Product	**Polymer Type**	**Stabilization**	**Solids %**	**Viscosity (cps)**	**Tg (°C)**	**pH Value**	**Features/Benefits**	**Paper / Board**	**Heat Seal**	**Wood**	**Film**	**Foil**	**Product**
Dur-O-Set® E-200	VAE	Polyvinyl Alcohol / Surfactant	54.0–57.0	1600–2900	0	3.8–5.2	Good adhesion strength to a wide variety of substrates. Fast setting. Excellent heat resistance.	●			●	●	**Dur-O-Set® E-200**
Dur-O-Set® E-200 HV	VAE	Polyvinyl Alcohol / Surfactant	54.0–57.0	2900–4600	0	3.8–5.2	Good adhesion strength to a wide variety of substrates. Fast setting. Excellent heat resistance.	●			●	●	**Dur-O-Set® E-200 HV**
Dur-O-Set® E-150	VAE	Polyvinyl Alcohol / Surfactant	54.0–57.0	1600–2900	17	3.8–5.2	Fastest setting with great cohesion strength. Good water resistance.	●			●		**Dur-O-Set® E-150**
Dur-O-Set® E-230	VAE	Polyvinyl Alcohol / Surfactant	53.5–56.5	1600–3200	-15	3.8–5.2	Excellent adhesion. Fast setting. Good water resistance. Very flexible film.	●			●		**Dur-O-Set® E-230**
Dur-O-Set® E-130	VAE	Polyvinyl Alcohol	54.0–57.0	1200–2500	26	4.2–5.2	Great cohesion strength and fast setting. Great water resistance.	●			●		**Dur-O-Set® E-130**
Dur-O-Set® A-802	VAE	Polyvinyl Alcohol / Surfactant	62.5–66.5	800–2200	0	3.8–5.2	Great adhesion to metal and metalized substrates. Good adhesion to films. Crosslinkable. Heat sealable.	●			●	●	**Dur-O-Set® A-802**
Dur-O-Set® E-352	VAE	Surfactant	58.5–61.5	< 1100	-22	4.8–6.2	Excellent adhesion and cohesion balance. Great water resistance. Residual dry tack and flexibility.	●			●	●	**Dur-O-Set® E-352**
Dur-O-Set® C-310	PVAc	Polyvinyl Alcohol	53.7–56.7	800–1700	40	4.3–5.7	Low viscosity. Great cohesion strength, compatible with wide variety of additives, plasticizers and other emulsions. Excellent mechanical stability.	●	●	●			**Dur-O-Set® C-310**
Dur-O-Set® C-325	PVAc	Polyvinyl Alcohol	54.5–57.5	1700–2900	40	4.3–5.7	Medium viscosity. Great cohesion strength, compatible with wide variety of additives, plasticizers and other emulsions. Excellent mechanical stability.	●	●	●			**Dur-O-Set® C-325**
Dur-O-Set® C-335	PVAc	Polyvinyl Alcohol	54.5–57.5	2800–4300	40	4.3–5.7	High viscosity. Great cohesion strength, compatible with wide variety of additives, plasticizers and other emulsions. Excellent mechanical stability.	●	●	●			**Dur-O-Set® C-335**

Product overview

Speciality Packaging & Converting Emulsions

	Typical values							Applications							
Product	**Polymer Type**	**Stabilization**	**Solids %**	**Viscosity (cps)**	**Tg (°C)**	**pH Value**	**Features/Benefits**	**Paper / Board**	**Lami-nating**	**Heat Seal**	**Film**	**Foil**	**Glass**	**En-velopes**	**Product**
Flexbond® 95	Styrene Acrylic	Colloid	48.5–51.5	1300–4700	-50	7.8–9.0	Excellent adhesion and low temperature performance. Tough and clear films. Excellent water resistance.		●				●		**Flexbond® 95**
Flexbond® 96	Styrene Acrylic	Colloid	42.5–45.5	700–1600	-39	8.1–8.9	Excellent adhesion and low temperature performance. Tough and clear films. Excellent water resistance.		●				●		**Flexbond® 96**
Flexbond® 97	Styrene Acrylic	Colloid	47.5–51.5	600–1800	-26	7.6–8.7	Excellent adhesion and low temperature performance. Tough and clear films. Excellent water resistance.		●				●		**Flexbond® 97**
Flexbond® 150	PVAc	Surfactant	53.5–56.5	250–950	-28	4.2–6.2	Excellent adhesion to difficult substrates. Exhibits high dry tack and peel with moderate shear strength. Ex-cellent water resistance.		●		●	●			**Flexbond® 150**
Resyn® 1072	PVAc	Dextrin	62.5–65.5	100–1100	30	3.3–5.7	High solids. Designed as base for re-moistenable adhesives.							●	**Resyn® 1072**
Resyn® SB-321	PVAc	Cellulosic	53.5–56.5	800–2200	30	4.3–5.7	Good mechanical stability. Good water resistance.	●		●					**Resyn® SB-321**
Resyn® 1025	PVAc	Polyvinyl Alcohol	53.5–56.5	700–2100	30	4.1–5.5	Fast setting. Great cohesion strength.	●							**Resyn® 1025**
Resyn® 1601	PVAc	Polyvinyl Alcohol	53.5–56.5	1300–3000	30	3.6–4.9	Crosslinkable. Heat sealable.	●		●					**Resyn® 1601**

Woodworking Emulsions

	Typical values									
Product	**Polymer Type**	**Stabilization**	**Solids %**	**Viscosity (cps)**	**Tg (°C)**	**pH Value**	***Water Resistance**	**Features/Benefits**	**Applications**	**Product**
Vinac® DPN890	PVAc	Polyvinyl Alcohol	47.5–51.5	3800–6200	34	2.3–3.7	●●●	Excellent water resistance. Very good pre-catalyzed viscosity stability. Meets US Type II and European D3 water resistance standards.	Wood bonding such as composite panel, paner-on-frame construction, edge/face gluing and laminating core stocks.	**Vinac® DPN890**
Vinac® DPN217	PVAc	Polyvinyl Alcohol	50.0–53.0	7800–12200	41	3.8–6.2	●●	Excellent adhesion. Outstanding viscosity stability when properly catalyzed. Can be formulated into a 1-part crosslinkable wood glue.	Wood bonding for end uses in door and frame con-struction, plywood constructions and veneering.	**Vinac® DPN217**
Resyn® X-208	PVAc	Polyvinyl Alcohol	49.0–53.0	4300–7700	30	4.4–5.4	●●●●	Excellent water resistance. Excellent adhesion to hard-wood. Can be formulated into a 2-part crosslinkable wood glue.	Wood bonding in panels, frames, edge/face and veneering applications.	**Resyn® X-208**
Resyn® 5764	PVAc	Polyvinyl Alcohol	53.5–56.5	2300–4700	30	3.8–5.2	●	Excellent adhesion. Fair water resistance.	General purpose wood adhesive for low moisture/ water intrusion applications.	**Resyn® 5764**

*● = Least ●●●● = Highest

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