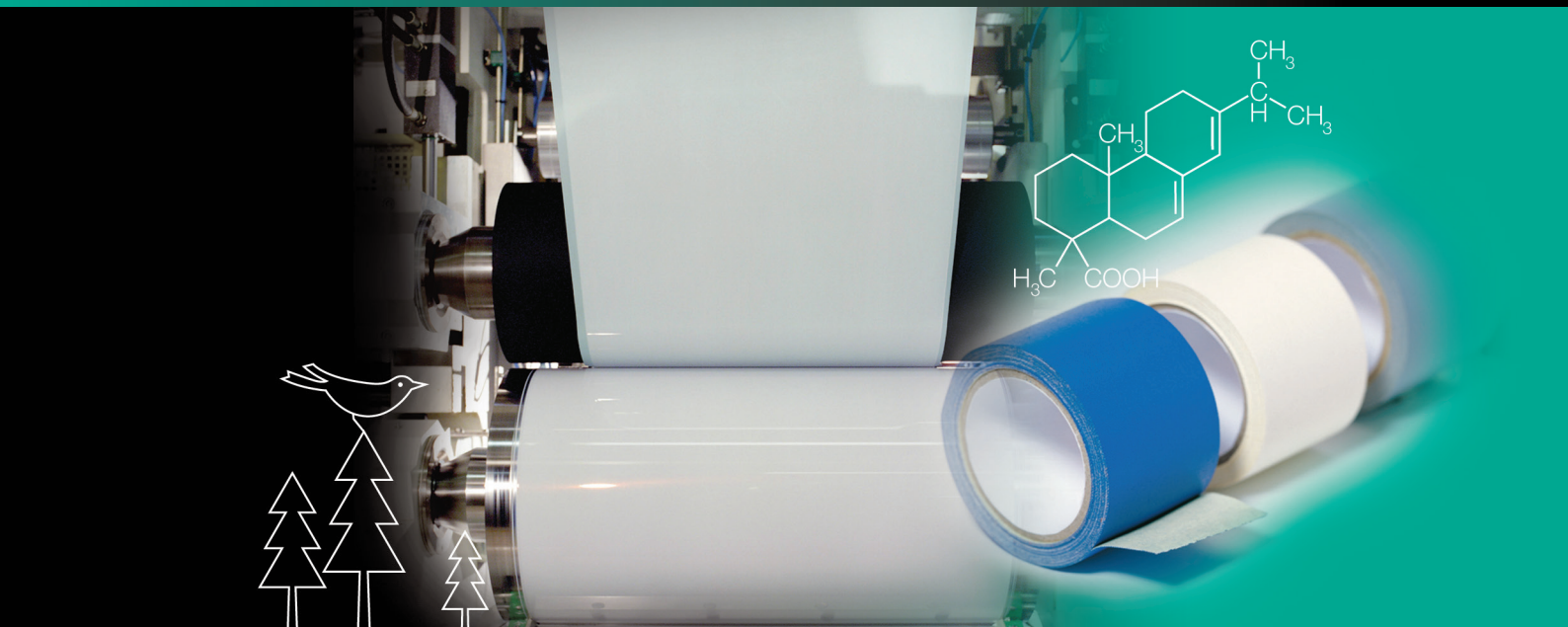


Adhesive Resins Product Guide

Europe



Resins and resin dispersions for hot melt, pressure-sensitive and non-pressure-sensitive adhesives

As one of the world's leading producers of ink and adhesive resins, **Lawter** has over 70 years of experience in creating innovative solutions to our customers' application needs.

Our global network of manufacturing plants gives us the ability to serve customers around the world. And with products formulated to meet thousands of diverse end-use applications, we are experts in serving a wide variety of industries.

With so many customers counting on us, our sales and production teams are backed by technical service and support that sets the industry standard. In an increasingly competitive world, you can count on Lawter to find a cost-effective and innovative solution to your industrial bonding and binding needs.



Lawter is a leading global supplier of resins and resin dispersions for adhesives. Our resin derivatives are also used in applications such as pigments, rubber intermediates, aroma chemicals and road marking.

Global presence

Lawter's customers enjoy the benefits of global manufacturing and regional support. Our main production sites are located in:

- Maastricht (The Netherlands)
- Kallo (Belgium)
- Baxley, Georgia (USA)
- Concordia (Argentina)
- Mount Maunganui (New Zealand)
- Fengkai (China)

Production alliances around the globe, including locations such as China and Korea, further enhance our ability to serve our customers.

Technical support

Your products are important to us. With technical service labs located in key regions of the world, Lawter is able to work closely with customers to achieve product excellence and value.

Our knowledge of resin chemistry paired with our customer's expertise has led to some exciting new products, including our latest waterborne tackifier systems.

Research and development

We work in close cooperation with our customers to improve their results and help create value. This collaboration achieves the required results.

We have a proud history of creating innovative and successful solutions to meet the exact requirements in all the industries we serve. Combining our knowledge of resin chemistry and our customers' expertise in their field of excellence has been the impulse for the creation of new resin types, like our latest waterborne tackifier systems. Customised products are developed by working under mutually confidential conditions. We also have product development centers located in all key regions.

Renewable raw material sources

Many of our raw materials are derived from renewable sources such as the rosin tapped from pine trees or from the pulp-making process for the paper industry.



Snowtack® tackifier dispersions

Capitalising upon technology that dates back to the first stable colloidal resin emulsions produced during the 1920's, Lawter has developed a wide range of tackifying dispersions which are specifically designed to serve the needs of the Adhesive and Surface coating Industries.

Snowtack® tackifier resin dispersions are aqueous, solvent-free dispersions for the manufacture of pressure-sensitive adhesives based on acrylic, natural rubber or SBR emulsions. When formulated correctly they provide an excellent balance of adhesion and cohesion to a wide range of substrates. Snowtack® can run on industry standard coaters at high speed due to its excellent stability. Snowtack® is an environmentally friendly component for your adhesive. All Snowtack® grades are alkyl phenol ethoxylate (APE) free.

Markets and applications

Waterborne Pressure-Sensitive Adhesive:

- Paper label, filmic label and tape

Waterborne Adhesive:

- Automotive
- Building and construction
- Bottle Labelling



Pinerez® and Pineclear® stabilised rosin esters, modified rosin esters, rosin acids and liquid rosin esters

Pinerez® and Pineclear® tackifier resins are recommended to enhance the adhesive performance in hot-melt and road marking adhesive applications. They are stabilised, light-colored resins with excellent viscosity stability, and have excellent compatibility with a range of polymers that are widely used in packaging and pressure-sensitive adhesives. These polymers include EVA, SIS, and SBS block copolymers, natural and synthetic rubber, and acrylics. Low VOC Pinerez products provide performance value in water-based solvent-free flooring adhesives.

Markets and applications

- Hot melt adhesives
- Solvent-based adhesives
- Road marking
- Construction adhesives
- Depilatory waxes
- Water-based flooring adhesives



Burez® rosin soaps

Burez® soaps are based upon disproportionated and modified rosins, saponified with sodium or potassium hydroxide. All our soaps have good stability and excellent resistance to crystallisation and are available in a range of differing solids and viscosities. The Burez range has been designed for mainly three specific applications: emulsion polymerisation, organic pigment production and wet glue formulations.

Markets and applications

- Emulsifiers for the manufacture of SBR, Polychloroprene rubber, ABS, and other specialty rubbers
- Modifier/tackifier in wet glues for bottle labelling
- Pigment coating
- Lubricant
- Plasticizer



Snowtack® Tackifier Resins										
Rosin Acid Dispersions										
Dispersion	Dispersion Properties						Dry Properties			Application Comments
	Solids (%)	Viscosity (mPa-s)	pH	Stabiliser	Particle size mean (microns)	Sieve residue at 100 micron (ppm)	Acid value (mg KOH/g)	Softening point (°C)	Glass transition point (°C)	
Snowtack® 765A E	50	500	7.5	anionic	<0.5	<100	>100	64	12	General purpose acid grade tackifier to boost adhesion when formulated with acrylic and SBR PSA polymers.
Snowtack® 779F E	59	350	8.0	anionic	<0.5	<100	>100	75	21	Higher softening point tackifier for acrylic and SBR PSA polymers with higher cohesive strength and good water resistance.
Rosin Ester Dispersions										
Dispersion	Dispersion Properties						Dry Properties			Application Comments
	Solids (%)	Viscosity (mPa-s)	pH	Stabiliser	Particle size mean (microns)	Sieve residue at 100 micron (ppm)	Acid value (mg KOH/g)	Softening point (°C)	Glass transition point (°C)	
Snowtack® SE724G E	51	400	9.0	polymeric	<1.0	<100	<25	37	-8	Tackifier designed to provide superior adhesive performance in PSA polymers for a wide range of substrates.
Snowtack® SE780G E	55	300	9.0	polymeric	<0.6	<100	<20	83	34	Tackifier with excellent resultant cohesive strength, adhesion and water resistance for PSA tape and label applications.
Snowtack® SE780K E	55	300	8.7	polymeric	<0.5	<60	<20	79	30	Tackifier for PSA polymers resulting in good balance of adhesion and cohesive strength with smaller mean particle size.
Snowtack® 100G E	56.5	300	9.0	polymeric	<0.6	<50	<20	99	60	High softening point tackifier for PSA adhesives for tape applications and labels requiring good mandrel performance.
Formulated Dispersions										
Dispersion	Dispersion Properties						Dry Properties			Application Comments
	Solids (%)	Viscosity (mPa-s)	pH	Stabiliser	Particle size mean (microns)	Sieve residue at 100 micron (ppm)	Acid value (mg KOH/g)	Softening point (°C)	Glass transition point (°C)	
Snowtack® 875F E	59	300	8.0	anionic	<0.4	<100	112	75	21	Tackifier designed to improve adhesion to apolar substrates with 2EHA acrylic and SBR PSA polymers.

Pinerez® Tackifier Resins					
Resins for Flooring Adhesives					
Resin	Ring & Ball Softening Point (°C)	Gardner Colour (50% Soln.)	Acid Value (mgKOH/g)	Viscosity (mPa-s)	Application Comments
Pinerez® 7016 E	–	7	12	1000@ 50°C	A low viscosity ester of rosin that has low VOCs. Pinerez 7016 E improves adhesion and meets the requirements for EC1 and Blue Angel adhesives.
Pinerez® 7024 E	–	7	9	4500@ 50°C	The typical use of Pinerez 7024 E is to improve adhesion in flooring adhesives meeting the requirements for EC1 and Blue Angel adhesives.
Pinerez® 7053 E	–	7	70	1000 @ 70°C	Pinerez 7053 E is a blend of resins and plasticiser for use as a Resin Melt tackifier meeting the requirements for EC1 and Blue Angel adhesives.
Pinerez® 3065 E	65	7	150	–	The typical use of Pinerez 3065 E is as a non crystallising tackifier to improve tack and peel in adhesives.
Pinerez® 3090 E	80	7	150	–	Pinerez 3090 E is a non crystallising rosin acid tackifier, that has low VOCs and meets the requirements for EC1 and Blue Angel adhesives.

Pinerez® Tackifier Resins					
Resins for Road Marking Adhesives					
Resin	Ring & Ball Softening Point (°C)	Gardner Colour (50% Soln.)	Acid Value (mgKOH/g)	Viscosity (mPa-s)	Application Comments
Pinerez® 2400M E	100	4	14	–	Pinerez 2400M E is a stabilised modified tall oil rosin ester suitable for road marking applications, giving good adhesion to glass beads.
Pinerez® 2800 E	103	4	14	–	Pinerez 2800 E is a unique modified tall oil rosin ester for road marking that does not require Xi labelling. Gives good adhesion to glass beads.
Pinerez® 2308 E	105	4	14	–	Pinerez 2308 E is a stabilised gum rosin ester suitable for road marking and hot melt adhesives.

Pinerez® Tackifier Resins					
Resins for Hot Melt Adhesives					
Resin	Ring & Ball Softening Point (°C)	Gardner Colour (50% Soln.)	Acid Value (mgKOH/g)	Viscosity (mPa-s)	Application Comments
Pinerez® 2484 E	82	4	14	–	Pinerez 2484 E is a stabilised tall oil rosin ester suitable for use to improve tack and adhesion in hot melt adhesives.
Pinerez® 2385 E	85	4	14	–	Pinerez 2385 E is a stabilised gum rosin ester suitable for use to improve tack and adhesion in hot melt adhesives.
Pinerez® 2394 E	98	4	14	–	Pinerez 2394 E is a stabilised gum rosin ester suitable for use to improve tack and adhesion in hot melt adhesives.
Pinerez® 2493 E	95	4	14	–	Pinerez 2493 E is a stabilised tall oil rosin ester specifically designed to improve tack and adhesion of pressure sensitive hot melt adhesives.
Pinerez® 2498 E	98	4	14	–	Pinerez 2498 E is a stabilised tall oil rosin ester suitable for use to improve tack and adhesion in hot melt adhesives.

Pineclear® Tackifier Resins					
Resins for Hot Melt Adhesives					
Resin	Ring & Ball Softening Point (°C)	Gardner Colour (50% Soln.)	Acid Value (mgKOH/g)	Viscosity (mPa-s)	Application Comments
Pineclear® 2484 E	82	3	14	–	Pineclear 2484 E is a stabilised light colored ester based on tall oil rosin suitable for use to improve tack and adhesion in hot melt adhesives.
Pineclear® 2498 E	98	3	14	–	Pineclear 2498 E is a stabilised light colored ester based on tall oil rosin suitable for use to improve tack and adhesion in hot melt adhesives.

Burez® Rosin Soaps					
Soap	Solids (%)	Acid Value (mgKOH/g)	Abietic acid (%)	Dehydro Abietate (%)	Application Comments
Burez® NA45 E	45	13	–	–	Sodium soap of modified rosin stabilised against crystallisation for use in wet bottle labelling adhesives.
Burez® DRS S70 E	70	11	< 0.2	38	Sodium soap of disproportionated rosin, primary application as emulsifier in emulsion polymerisation.
Burez® DRS P80 E	80	11	< 0.2	42	Potassium soap of disproportionated rosin, primary application as emulsifier in emulsion polymerisation.

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