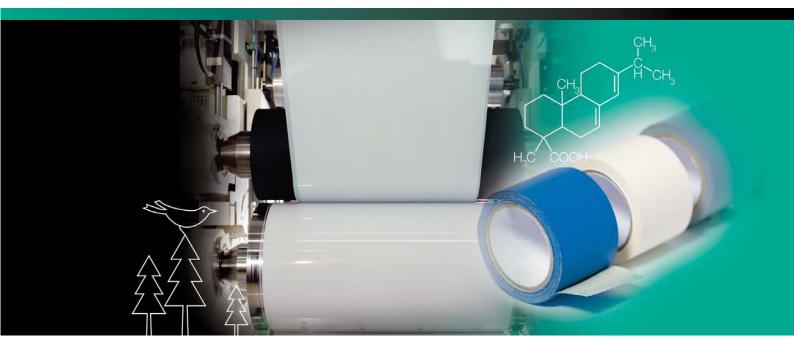


### Adhesive resins product guide

Asia Pacific



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

# Snowtack® tackifier dispersions

Capitalizing upon technology that dates back to the first stable colloidal resin emulsions produced during the 1920s, 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 pressuresensitive 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



# Pinerez® stabilized rosin esters, modified rosin esters esters and liquid rosin esters

Pinerez® tackifier resins are recommended to enhance the adhesive performance in hot-melt and solvent-based adhesive applications. They are stabilized, 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
- Reactive PUR adhesives
- Construction adhesives
- Rubber compounding
- Sealants
- Depilatory waxes
- Chewing gum
- 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 crystallization and are available in a range of differing solids and viscosities. The Burez range has been mainly designed for three specific applications: emulsion polymerization, organic pigment production and wet glue formulations.

#### Markets and applications

- Emulsifiers for the manufacture of SBR, Polychloroprene rubber, ABS, PVC, and other specialty rubbers
- Modifier/tackifier in wet alues
- Pigment coating
- Lubricant





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 chewing gum.

#### Global presence

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

- Maastricht (The Netherlands)
- 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 customers' 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. Customized 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.



Burez® Rosin Soaps									
Rosin Soaps	Solids %	Acid Value (mgKOH/g)	Abietic acid (%)	Dehydro Abietate (%)	Gardner colour	표	Application Comments		
Burez® NA 18 502D	17.5-18.5	1 Max	0.5 Max	8.5 Min	4 Max	10.2-10.8	Emulsifier in emulsion polymerization(ABS,SBR,NBR), Adhesives - Bottle labeling, Pigment resination.		
Burez® K25 502D	24.5-25.5	1 Max	0.1 Max	10.6 Min	4 Max	10.2-10.6	Emulsifier in emulsion polymerization(ABS,SBR,NBR), Adhesives - Bottle labeling, Pigment resination.		
Burez® NA 40 502D	39-41	6-10	Max 0.1	Min 18	4 Max	N/A	Emulsifier in emulsion polymerization(ABS,SBR,NBR), Adhesives - Bottle labeling, Pigment resination.		
Burez® NK 40 502D	39-41	6-10	Max 0.1	Min 18	4 Max	N/A	Emulsifier in emulsion polymerization(ABS,SBR,NBR), Adhesives - Bottle labeling, Pigment resination.		
Burez® K79	80	10	N/A	N/A	N/A	9.5-10.0	Potassium soap of high grade rosin used as an emulsifier in water-based adhesives.		

	Disners	ion Prone	rties				Dry Properties			
Dispersion Properties							Dry Properties			
Snowtack® Tackifier Resins	Solids (%)	Viscosity (mPa·s)	Hď	Stabilizer	Particle size (mean) (microns)	Sieve residue at 100 (ppm)	Acid Value (mgKOH/g)	Softening point (°C)	Glass transition point (°C)	Application Comments
Snowtack® SE780G	55	300	9	polymeric	<0.6	<100ppm	<20	83	34	Tackifier with excellent resultant cohesive strength, adhesion and water resistance for PSA tape and label applications.
Snowtack® SE724G	51	400	9	polymeric	<1	<100ppm	<25	37	-8	Tackifier designed to provide superior adhesive performance in PSA polymers for a wide range of substrates.
Snowtack® SE776A	50	450	7.5	anionic	<0.3	<100ppm	<27	77	27	General purpose ester grade for SBR and acrylic polymers.
Snowtack® SE790G	57	300	9	polymeric	<0.6	<100ppm	<12	88	39	Improved cohesive strength and water resistance.
Snowtack® SE100G	56.5	300	9	polymeric	<0.6	<50ppm	<20	99	60	High softening point tackifier for PSA adhesives for tape applications and labels requiring good mandrel performance.
Snowtack® SE772A	50	350	8	anionic	<0.3	<100ppm	<20	70	20	General purpose ester grade for SBR and acrylic polymers with good low temperature performance.

Pinerez® Tackifier Resins									
RESIN	Ring & Ball Softening Point (°C)	Gardner Colour (50% Soln.)	Acid Value (mgKOH/g)	Viscosity (mPa.s)	Application Comments				
Pinerez® 1290	90-95	7	210	N/A	Tall oil rosin acid of moderate softening point with broad compatibility used as a tackifier in solvent and hot melt adhesives.				
Pinerez® 2110	80-85	4	14	N/A	Light coloured rosin ester of moderate softening point with broad compatibility used to improve adhesion to difficult surfaces such as PET.				
Pinerez® 2210	90-95	4	14	N/A	Highly stabilised rosin ester with broad polymer compatibility, excellent heat and oxidation stability and used as a tackifier in solvent-based and hot melt adhesives.				
Pinerez® 2260	98-103	5	14	N/A	Highly stabilised rosin ester of medium to high softening point with low odour and used as a tackifier in solvent-based and hot melt adhesives.				
Pinerez® 2410	98-103	4	14	N/A	Highly stabilised rosin ester of medium to high softening point with low odour and colour and used as a tackifier in solvent-based and hot melt adhesives.				
Pinerez® 2415	112-117	4	14	N/A	Highly stabilised rosin ester of high softening point with low colour and heat stability and used as a tackifier in solvent-based and hot melt adhesives.				
Pinerez® 2400M	98-103	5	14	N/A	Highly stabilised rosin ester of medium to high softening point with good colour and viscosity stability and used in hot melt formulations for road marking.				
Liquid Rosin Este	er								
Pinerez® 2010LV		4	14	10,000 @°40 C	Highly stabilized rosin ester with light color, low odor and low viscosity at ambient temperature and is used in hot melt, solvent-based and water-based adhesives.				
Pinerez® LE4014		7	14	6000	Liquid ester used to improve adhesion in water-based flooring adhesives and as a plasticizer resin in combination with harder resins.				

Pinechem® Pine Chemicals									
	Gardner Colour	Acid Value (mgKOH/g)	Rosin Acid Content (%)	Viscosity (mPa.s)	Application Comments				
Pinechem® 100	4 Max	191	1 Max	N/A	Tall oil fatty acid of low rosin content and low yellowiing used for alkyd resin manufacture, detergents, soaps and emulsifiers.				
Pinechem® 110	5 Max	189	3 Max	N/A	Tall oil fatty acid of medium rosin content and good reactivity used for alkyd resin manufacture, detergents, soaps and emulsifiers.				
Pinechem® 300	7 Max	185	28-30	N/A	Distilled tall oil of medium rosin content and excellent surfactant properties for use in alkyd resin manufacture, detergents, emulsifiers, metal working fluids and lubricants.				
Pinechem® 327	8 Max	185	30-33	N/A	Distilled tall oil of medium rosin content and excellent surfactant properties for use in detergents, emulsifiers, metal working fluids and lubricants.				
Pinechem® 450	N/A	30	10-15	8,600 @°50 C	Tall oil pitch with high tack used as a rubber processing aid, bitumen additive and dust suppressant.				
Pinechem® 454	N/A	76	N/A	3,300 @°50 C	Tall oil pitch with high tack and high adhesion used as a rubber processing aid and tackifier.				

Pinechem® Pine Chemicals								
	Colour	Hazen Colour	Terpene Alcohol Content (%)	Terpene Hydrocarbons (%)	Myrcene Content (%)	Application Comments		
Pinechem® 530	N/A	30 Max	85-90	N/A	N/A	High quality pine oil with a pleasant odour containing a minimum of 85% terpene alcohols and used in disinfectants and detergents.		
Pinechem® 540	N/A	30 Max	65-70	N/A	N/A	High quality pine oil containing a minimum of 65% terpene alcohols used as a solvent and in detergents.		
Pinechem® 560	N/A	30 Max	N/A	90 Min	N/A	High quality dipentene containing a minimum of 90% terpene hydrocarbons used in resins and as a solvent in cleaning solutions.		
Pinechem® 561	N/A	30 Max	N/A	95 Min	N/A	High quality dipentene containing a minimum of 95% terpene hydrocarbons used as a solvent in paints, waxes and degreasers.		
Pinechem® 590	N/A	30 Max	Min 90	N/A	N/A	High quality pine oil with a pleasant odour containing a minimum of 90% terpene alcohols and used in disinfectants and detergents.		
Pinechem® 620	Pale amber	N/A	N/A	N/A	74 Min	High purity myrcene used in the manufacture of fragrance intermediates and vitamin synthesis.		

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