

SureTac 1380

(Previously SureTac 1913)

80°C Rosin Ester Resin Emulsion

SureTac 1380 is a solvent-free waterborne emulsion of a stable, light colored rosin ester resin. This is a non-acid stable resin emulsion for use in tackifying various polymer latexes. This emulsion may or may not need stabilizing depending on the latex being used. For stabilization, we suggest using 3 – 4 parts of 25% nonylphenol ethoxylate surfactant, such as Igepal CO-630, to the SureTac 1380 prior to mixing with the latex. When formulated into adhesives, this tackifier gives performance properties approaching hydrogenated wood rosin esters.

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| FDA Status | Complies with 21CFR175.105 |
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| Applications | Blending with natural rubber latex, natural rubber/SBR latex blends |
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Typical Properties

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|-----------------------------------|---------------|
| Total Solids | 56.0 ± 1.0 |
| Viscosity; LVF #3 @ 30 RPM @ 23°C | 500 ± 100 cps |
| pH | 10.0 ± 1.0 |
| Softening Point | 80°C |
| Average Particle Size | < 1.0 micron |
| Gardner Color, Neat Resin | <4 |

Tackifier response in 2-Ethylhexyl Acrylate Polymer Latex:

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|---|--------------|
| Web: | 1 mil Mylar® |
| Coatweight; dry mils | 0.75 |
| 180° Peel Adhesion, lb./in, 30' dwell (1) | |
| Control – No tackifier | 2.2 |
| 15 Parts SureTac 1380 (dry/dry) | 2.1 |
| 30 Parts SureTac 1380 (dry/dry) | 3.1 |
| 50 Parts SureTac 1380 (dry/dry) | 3.4 |
| Loop Tack, lb./in ² (2) | |
| Control – No tackifier | 1.6 |
| 15 Parts SureTac 1380 (dry/dry) | 2.4 |
| 30 Parts SureTac 1380 (dry/dry) | 2.8 |
| 50 Parts SureTac 1380 (dry/dry) | 3.2 |
| Shear; ½" x ½" x 500 gms; hours (3) | |
| Control – No tackifier | 5.1 |
| 15 Parts SureTac 1380 (dry/dry) | 2.3 |
| 30 Parts SureTac 1380 (dry/dry) | 1.6 |
| 50 Parts SureTac 1380 (dry/dry) | 1.9 |

/continued

This product information is presented in good faith and is to the best of our knowledge, accurate. It is intended to be used as a guide and is not to be construed as a specification for products described herein. Dyna-Tech does not guarantee satisfactory results in any application from reliance upon this information and assumes no liability for any loss or damage arising out of its use. Dyna-Tech recommends that the user of our products thoroughly test them under end use conditions to assure that they meet the requirements of intended applications.

Tackifier response in a 60/40 SBR Latex (25% Styrene/75% Butadiene)/Natural Rubber Latex Blend:

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|---|--------------|
| Web: | 1 mil Mylar® |
| Coatweight; dry mils | 0.75 |
| 180° Peel Adhesion, lb./in, 30' dwell (1) | |
| 120 Parts SureTac 1380 (dry/dry) | 2.8 |
| 150 Parts SureTac 1380 (dry/dry) | 3.4 |
| 180 Parts SureTac 1380 (dry/dry) | 4.4 |
| Loop Tack, lb./in ² (2) | |
| 120 Parts SureTac 1380 (dry/dry) | 4.0 |
| 150 Parts SureTac 1380 (dry/dry) | 4.2 |
| 180 Parts SureTac 1380 (dry/dry) | 4.4 |
| Shear; ½" x ½" x 500 gms; hours (3) | |
| 120 Parts SureTac 1380 (dry/dry) | 10.3 |
| 150 Parts SureTac 1380 (dry/dry) | 9.6 |
| 180 Parts SureTac 1380 (dry/dry) | 11.5 |

Tackifier response in SBR Latex (25% Styrene/75% Butadiene):

| | |
|---|--------------|
| Web: | 1 mil Mylar® |
| Coatweight; dry mils | 0.75 |
| 180° Peel Adhesion, lb./in, 30' dwell (1) | |
| 120 Parts SureTac 1380 (dry/dry) | 3.1 |
| 150 Parts SureTac 1380 (dry/dry) | 4.1 |
| 180 Parts SureTac 1380 (dry/dry) | 5.0 |
| Loop Tack, lb./in ² (2) | |
| 120 Parts SureTac 1380 (dry/dry) | 3.6 |
| 150 Parts SureTac 1380 (dry/dry) | 3.0 |
| 180 Parts SureTac 1380 (dry/dry) | 2.1 |
| Shear; ½" x ½" x 500 gms; hours (3) | |
| 120 Parts SureTac 1380 (dry/dry) | 3.5 |
| 150 Parts SureTac 1380 (dry/dry) | 4.7 |
| 180 Parts SureTac 1380 (dry/dry) | 6.1 |

Samples were prepared by transfer coating and drying 2½' @ 100°C

- (1) PSTC-1 modified
- (2) TLMI Loop Tack, 1 in² contact area, 12 ipm separation
- (3) PSTC-7

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