# FM® 309-1

#### Adhesive

Cytec Industries Inc.

### Message:

FM® 309-1 a next generation adhesive film for bonding composite and metallic structures. This new film provides a unique combination of high Tg [182°C (360°F)], high toughness and higher temperature shear properties. FM 309-1 is designed for co-cure, co-bond or secondary bonding applications and is compatible with most 177°C (350°F) curing epoxy-based prepreg systems. This new film has excellent resistance to pre-bond and post-bond humidity and has a service temperature of 177°C (350°F). FM 309-1 adhesive film provides excellent handling properties (good tack and drape) and has a minimum shop life of 30 days at 24°C (75°F). FM 309-1 adhesive can be supplied as a supported (woven glass, knit or mat carrier) or unsupported film at various weights and thicknesses. For co-cure or co-bond applications, adhesive film weight of 147 - 244 gsm (0.030 - 0.050 psf) with mat carrier is recommended. This adhesive film is suitable for bonding of monolithic or sandwich structures. Honeycomb sandwich panels manufactured using FM 309-1 adhesive film demonstrate excellent laminate quality (void content <1%) and very good filleting. FM 309-1 adhesive film can be cured at 177°C (350°F) in 90 minutes at 0.28 MPa (40 psi) or can also be cured under vacuum-only pressure. The performance after vacuum cure is comparable to that after pressure cure.

Suggested Applications:

Bonding of composite and metallic structures

Co-cure, co-bond and secondary bonding applications

General Information		
Features	Good Adhesion	
	Good Toughness	
Uses	Adhesives	
	Bonding	
	Laminates	
Appearance	Red	
Forms	Film	
Physical	Nominal Value	Unit
Specific Gravity	1.12	g/cm³
Additional Information	Nominal Value	Unit
Volatiles	< 1.0	%

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#### Recommended distributors for this material

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