TF7035 TCR™ Adhesive Film

TF7035 is a high strength modified epoxy film adhesive with a fast cure time at 250°F (120°C). This film can be supplied with or without a synthetic fabric carrier. It is designed for high peel strengths in load bearing structures. Testing of this formulation has met the requirements set forth in specification **MMM-A-132, Type 1, Class 2** and exceeded the requirements of **MIL-A-25463**.

Resin Properties and Applications

Mechanical Properties per MMM-A-132 Lap Shear Test:

	Temperature (°F)		
	-70	**75**	**180**
Tensile Shear			
Standard (psi)	6000	5800	4500
30 days Salt Spray (psi)		5700	
100% Humidity at 120°F (psi)		5700	
7 days JP-4 Fuel (psi)		5500	
7 days Anti-Icing Fluid (psi)		5400	
7 days Hydraulic Oil (psi)		5400	
7 days Skydrol (psi)		5100	
T-Peel .020-.020 Al (in-lb/in)	39	40	37
Flatwise Tensile (psi)	1500	1400	1200
Flexural Strength			
Standard (psi)	2800	2900	2600
180°F for 192 hrs (lb)			2800
30 days at 100% humidity (lb)		2800	
30 days Salt Spray (lb)		2800	
30 days Hydrocarbon Fluid (lb)		2900	
Conditioned Climbing Drum Peel			
MIL-H-3136, Type 2 (in-lb/in)		31	
JP-4 Test Fluid (in-lb/in)		30	
Water (in-lb/in)		32	
Salt Spray (in-lb/in)		31	
Humidity (in-lb/in)		30	
MIL-5606 (in-lb/in)		29	

Typical Use

Used in composite, honeycomb, metal, and other adhesion applications requiring high shear strengths and corrosion resistance.

Available in weight ranges from .030 - .070 lbs/ft^2 (thicknesses of .006 - .014 inches).

Cure

Ramp up to 250°F (121°C) at a rate of 3 - 10°F per minute.

Hold for 1 hour at 10 PSI minimum.

Ramp down to 150°F (66°C) at < 10°F per minute before removing from heat source.

Storage Requirements

The adhesive film should remain sealed and stored in its original package.

The shelf life is 6 months from the date of manufacture when the maximum storage temperature does not exceed 40°F (4°C). Out time is 15 days at 77°F (25°C).

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