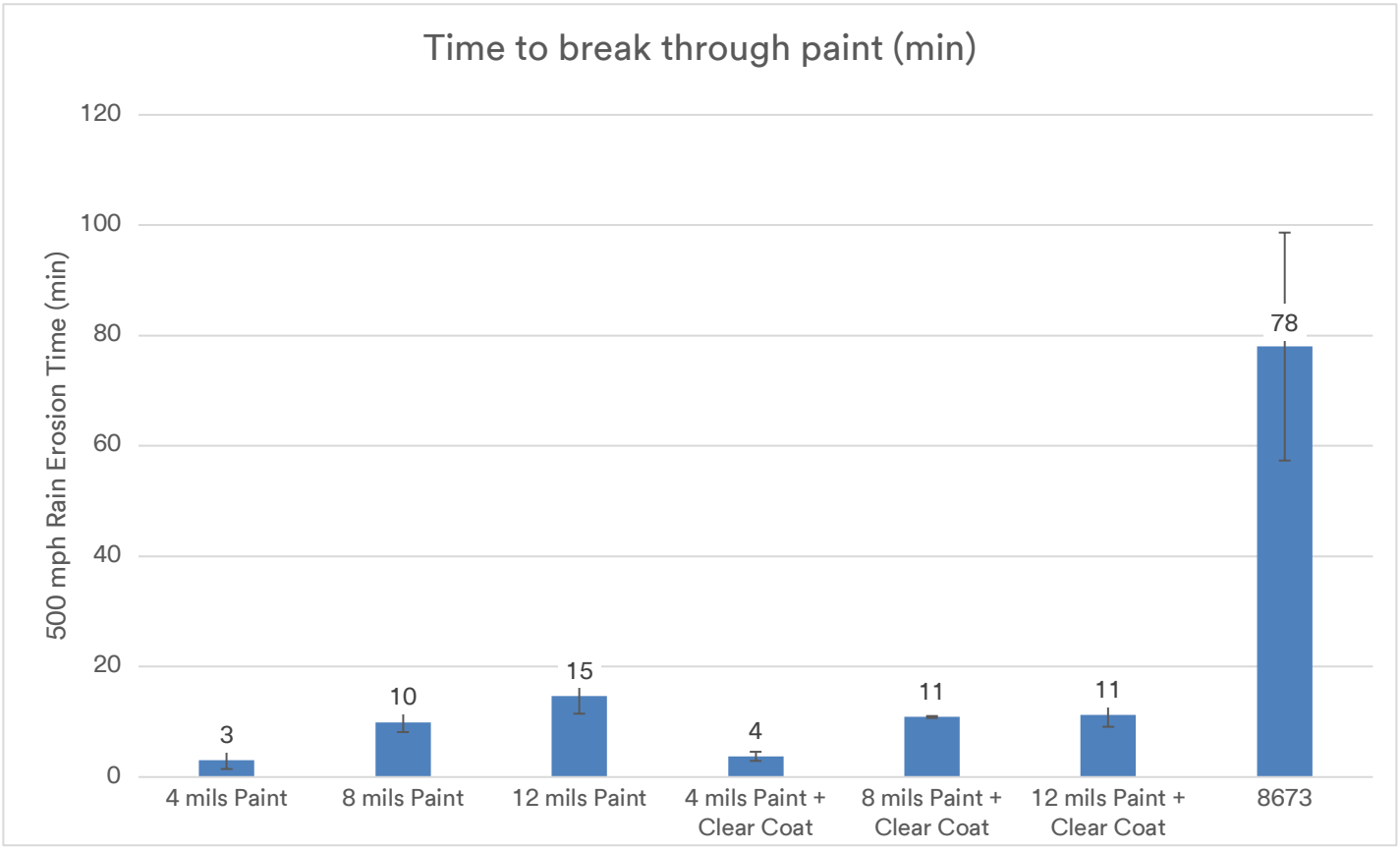
3M Science. Applied to Life.™

3M™ Polyurethane Protective Tape

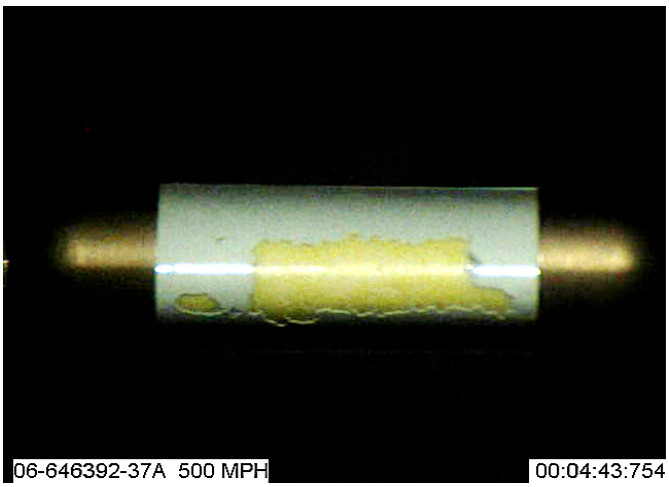
Rain Erosion Test Data – Tape vs. Paint

Chart below is for a 500-mph rain erosion test done at the University of Dayton Research Institute on WPAFB. The testing was done at 1"/hr. rainfall and 2 mm droplet size. The substrates were coated glass fiber composite airfoils. The paint used was PPG CA8000. The samples with clear coat used Akzo Nobel Aerodur 3002 Clear Coat. The painted airfoil data is based on 2 data points each while the PPT data is based on 6 data points each.



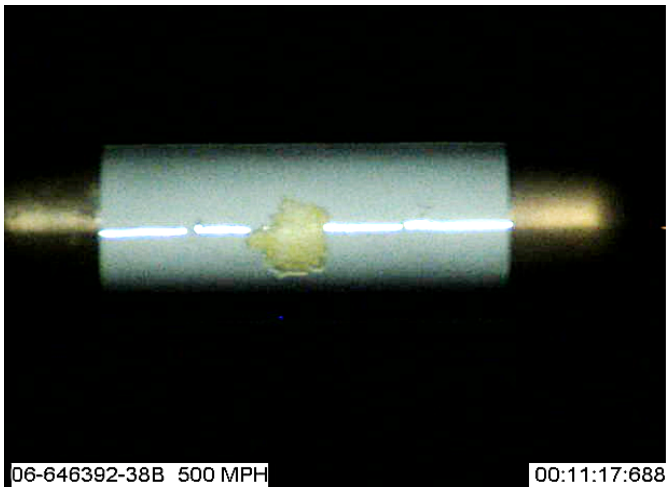
Paint coupon photos, mean time to impingement and impingement time on coupon shown

4 mil paint, base coat/clear coat - mean average time to impingement 4 minutes, coupon 06-646392-37A



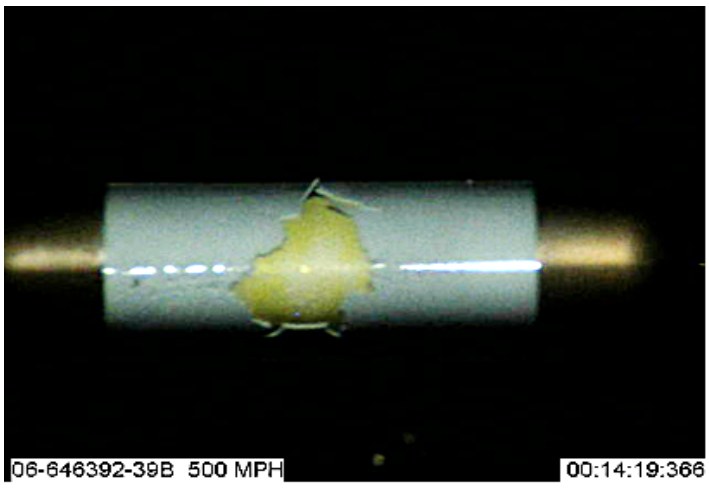
Photo, time to impingement 4.2 minutes

8 mil paint, base coat/clear coat and 12 mil paint, base/clearcoat, 11-minute mean time to impingement on substrate



8 mil paint/clearcoat- 06-646392-38B

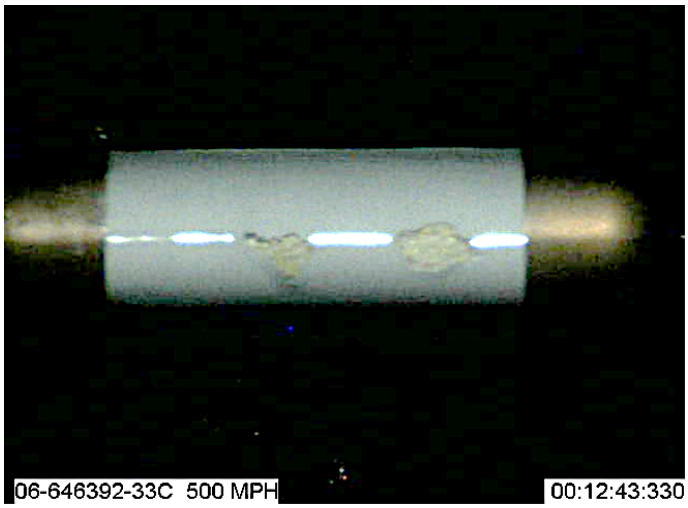
Photo, time to impingement 10:45 Minutes



12 mil paint/clearcoat- 06-646392-39B

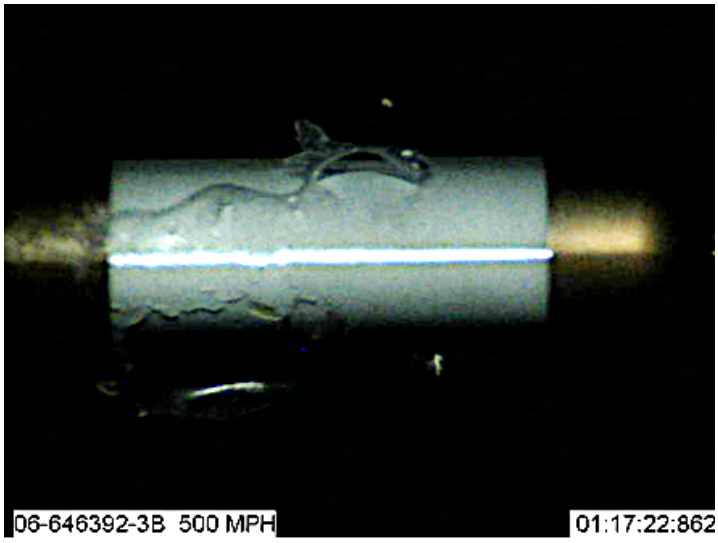
Photo, time to impingement 13:40 minutes

**12 mils of base coat paint coupon 06-646392-33C,
15-minute mean average time to impingement on substrate**



Photo, time to impingement 11 minutes

**8673 polyurethane protective tape coupon 06-646392-3B,
78 minutes mean time to impingement on substrate**



Photo, time to impingement 77 minutes

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