Scope of Laboratory Services

As a trusted services provider to the aerospace industry, FMi Chemical holds accreditation for laboratory testing from the ANAB® for the international standard ISO/IEC 17025:2017, as well as accreditation for nonmetallic materials testing from the Nadcap® Management Council. FMi Chemical's scope of laboratory services includes, but is not limited to, the following:

TEST FIELD	MATERIALS TESTED	PROPERTIES MEASURED	TEST SPECIFICATIONS AND STANDARDS	TEST METHOD / EQUIPMENT	NADCAP ACCREDITATION
Physical	Polymers	Water absorption	ASTM D570	Analytical balance and oven	AC7122/2 Rev A: Test code 2.4.1 Water absorption
Physical	Polymers	Dry heat resistance	ASTM D573	Analytical balance, oven, and durometer	AC7122/2 Rev A: Test code 2.17.1 Deterioration in air oven
Mechanical	Polymers	Lap shear strength	ASTM D816 Method B, Type 1	Instron	
Mechanical	Polymers	% Cohesive failure	ASTM D816 Method B, Type 1	Instron	
Physical	Polymers	% Nonvolatile content	ASTM D2369; PWA MCL R-2; *Customer-provided specifications*	Analytical balance and oven	
Physical	Coatings	Solid content	ASTM D2369	Analytical balance and oven	
Physical	Polymers	Leveling	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual	
Physical	Polymers, Coatings	Heat resistance	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual	
Physical	Polymers	Specific gravity	ASTM D1298	Hydrometer	
Physical	Polymers	Specific gravity	ASTM D297, ASTM D792 Method A; PWA MCL S-42; *Customer-provided specifications*	Analytical balance	AC7122/2 Rev A: Test code 2.2.1 Density and specific gravity

TEST FIELD	MATERIALS TESTED	PROPERTIES MEASURED	TEST SPECIFICATIONS AND STANDARDS	TEST METHOD / EQUIPMENT	NADCAP ACCREDITATION
Physical	Polymers	Viscosity	ASTM D445	Cannon 50 capillary viscometer	
Physical	Polymers	Viscosity	ASTM D2196; PWA MCL S-77; *Customer-provided specifications*	Brookfield viscometer	
Physical	Polymers	Corrosion	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual	
Physical	Coatings	Adhesion	ASTM D2510	Visual	
Mechanical	Polymers	Tensile strength	ASTM D412, Die C	Instron	AC7122/1 Rev B: Test code 1.1.4 Tensile strength
Mechanical	Polymers	Elongation	ASTM D412, Die C	Instron	AC7122/1 Rev B: Test code 1.1.4 Elongation
Physical	Polymers	Hardness	ASTM D2240	Durometer	AC7122/2 Rev A: Test code 2.1.3 Hardness (Shore)
Physical	Resins	Hardness	ASTM D785	Rockwell hardness tester	
Mechanical	Resins	Shear strength	ASTM D4562; PWA 549 P 3.3.1.1; *Customer-provided specifications*	Instron	
Mechanical	Resins	Locking strength	ASTM D5649; PWA 549 P 3.3.2.1; *Customer-provided specifications*	Torque wrench	
Physical	Polymers	Flow rate	ASTM D2202; PWA MCL S-71; *Customer-provided specifications*	Flow rate fixture and timer	
Physical	Polymers	Working life	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual and timer	
Physical	Polymers, Coatings, Resins	Color	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual	

TEST FIELD	MATERIALS TESTED	PROPERTIES MEASURED	TEST SPECIFICATIONS AND STANDARDS	TEST METHOD / EQUIPMENT	NADCAP ACCREDITATION
Physical	Polymers	Extrusion rate	PWA MCL S-71; *Customer-provided specifications*	Analytical balance and timer	
Physical	Polymers	Tack-free time	ASTM D2377; PWA MCL S-70; *Customer-provided specifications*	Visual and timer	
Physical	Coatings	Density	ASTM D891, ASTM D792 and ASTM D1475; PWA MCL R-29	Pyconometer and analytical balance	
Mechanical	Polymers	Peel strength	ASTM D903; PWA MCL S-81; *Customer-provided specifications*	Instron	
Physical	Polymers, Coatings, Resins	Quality	PWA 300/ LCS F17 A-3 Table 1; *Customer-provided specifications*	Visual	
Physical	Polymers	Effects of liquids	ASTM D471	Analytical balance	AC7122/2 Rev A: Test code 2.12.1 Effects of liquids

For more information about FMi Chemical's products and services please call **(+1) 860-243-3222**.
Contact us by email at info@fmichemical.com, and visit FMi Chemical online at fmichemical.com.

Rev.3-111819