

SAE AMS 1424 Type I Fluids

Minimum Initial Qualification Test Requirements

Anti-Icing Performance- Aerodynamic Acceptance Tests

Fluid form	Number of tests and description							Volume ⁶ of fluid required (L)
	WSET ¹	HHET ²	FPET ³ High Speed Ramp	FPET ⁴ Low Speed Ramp	Physical ⁵ Properties	Fluid Stability		
						Thermal Stability	Hard Water Stability	
Concentrate ⁷	4*	4*	21*	21*	2*	1	1	40
Ready to use ⁸	2	2	12	12	1	1	-	20
Concentrate and Ready to use ⁹	4*	4*	21*	21*	2*	1	1	40
	2**	2**	12**	12**	1**	1**	-	20

⁽¹⁾WSET : Water Spray Endurance Test, (2 tests per dilution)

⁽²⁾HHET : High Humidity Endurance Test, (2 tests per dilution)

⁽³⁾FPET : Flat Plate Elimination Test, (High Speed Ramp)

⁽⁴⁾FPET : Flat Plate Elimination Test, (Low Speed Ramp)

⁽⁵⁾Physical Properties : Viscosity, surface tension, refractive index and pH.

⁽⁶⁾Volume of fluid required, (if FPET Low Speed Ramp is required, 20 additional litres should be provided)

⁽⁷⁾Concentrate*: The fluid is only supplied in concentrate form (intended to be used diluted), AMS 1424 paragraphs 3.5.2 and 3.3.5.1 (case 1)

⁽⁸⁾Ready to use : The fluid is only supplied in ready to use form, AMS 1424 paragraphs 3.5.2 and 3.3.5.1 (case 2)

⁽⁹⁾ Concentrate and Ready to use**: The fluid is supplied in both forms, concentrate and ready to use, AMS 1424 paragraphs 3.5.2 and 3.3.5.1 (case 3)

* Highest concentration intended to be used and 50/50 dilution

**Ready to use dilutions falling outside of the tested dilution range (e.g. a volume ratio less than 50/50 or higher than the highest concentration tested) shall be tested