



PRODUCT DATA SHEET

SafeTemp® ES Plus Aircraft Deicing Fluid SAE AMS 1424M Type I

PHYSICAL PROPERTIES	ASTM METHOD	REQUIREMENT	TYPICAL
Appearance	HOC STM 5	Orange	Orange
Specific Gravity, 15.6/15.6°C	ASTM D 4052	1.044 +/- 0.015	1.045
pH Value	ASTM E 70	7.4 +/- 0.5	7.2
Flash Point, °C	ASTM D 93	>100	>100
Fluid Stability		Conforms to 3.3.1 through 3.3.4 of SAE AMS 1424M	Pass
Refractive Index, 20°C	ASTM D 1747	1.4245 +/- 0.0015	1.4235
Effect on Aircraft Materials		Conforms to 3.4.1 through 3.4.9 of SAE AMS 1424M	Pass

AIRCRAFT MATERIAL COMPATIBILITY (SMI)	Conforms to AMS 1424M ¶ 3.4
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PERFORMANCE PROPERTIES (AMIL)

Water Spray Endurance Test	(AMS 1424M)	Conforms
High Humidity Endurance Test	(AMS 1424M)	Conforms
Foam Stability	(AMS 1424M)	Conforms

AERODYNAMIC PERFORMANCES (AMIL)

	65/35	50/50
LOW TAKE-OFF ROTATION SPEED	-18.0°F (-27.5°C)	-1.0°F (-18.5°C)
LARGE TRANSPORT TYPE JET	-24.0°F (-31.0°C)	-1.0°F (-18.5°C)

LOWEST OPERATIONAL USE TEMPERATURE (LOUT) FOR HIGH-SPEED AIRCRAFT

	100/0	65/35	50/50
HIGH-SPEED AERODYNAMICS	-	-24.0°F (-31.0°C)	-1.0°F (-18.5°C)
FREEZING POINT	Does Not Freeze	-43.0°F (-41.5°C)	-14.8°F (-26.0°C)
LOUT FOR HIGH-SPEED AIRCRAFT	DO NOT USE	-24.0°F (-31.0°C)	-1.0°F (-18.5°C)

LOWEST OPERATIONAL USE TEMPERATURE (LOUT) FOR LOW-SPEED AIRCRAFT

	100/0	65/35	50/50
HIGH-SPEED AERODYNAMICS	-	-17.5°F (-27.5°C)	-1.0°F (-18.5°C)
FREEZING POINT	Does Not Freeze	-43.0°F (-41.5°C)	-14.8°F (-26.0°C)
LOUT FOR LOW-SPEED AIRCRAFT	DO NOT USE	-17.5°F (-27.5°C)	-1.0°F (-18.5°C)

AQUATIC TOXICITY	Conforms to AMS 1424M
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*The data presented is for informational purposes only and shall not constitute a guarantee for any specific product features.