

## ASTM Non-Mercury Liquid-In-Glass Thermometers Alternatives

ASTM Mercury Thermometers	ASTM Non-Mercury Thermometers	Temperature Range	Scale Error, Max*
5C / 5F	S5C / S5F	-38 to 50°C (-35 to 120°F)	0.5°C (1°F)
12C / 12F	S12C / S12F	-20 to +102°C (-5 to +215°F)	0.15°C (0.25°F)
18C / 18F	S18C / S18F	34 to +42°C (94 to +108°F)	0.1°C (0.2°F)
22C / 22F	S22C / S22F	95 to 103°C (204 to 218°F)	0.1°C (0.2°F)
56C / 56F	S56C / S56F	19 to 35°C (66 to 95°F)	0.10°C (0.20°F)
58C / 58F	S58C / S58F	-34 to +49°C (-30 to +120°F)	0.3°C (0.5°F)
59C / 59F	S59C / S59F	-18 to + 82°C (0 to 180°F)	0.3°C (0.5°F)
62C / 62F	S62C / S62F	-38 to +2°C (-36 to + 35°F)	0.1°C (0.2°F)
63C / 63F	S63C / S63F	-8 to +32°C (18 to 89°F)	0.1°C (0.2°F)
64C / 64F	S64C / S64F	22 to 55°C (77 to 131°F)	0.1°C (0.2°F)
65C / 65F	S65C / S65F	50 to 80°C (122 to 176°F)	0.1°C (0.2°F)
66C / 66F	S66C / S66F	75 to 105°C (167 to 221°F)	0.1°C (0.2°C)
67C / 67F	S67C / S67F	95 to 155°C (203 to 311°F)	0.2°C (0.5°F)
91C	S91C	20 to 50°C	0.1°C
116C	S116C	18.9 to 25.1°C	0.1°C
117C	S117C	23.9 to 30.1°C	0.1°C
120C	S120C	38.6 to 41.4°C	0.1°C
130C / 130F	S130C / S130F	-7 to +105°C (20 to +220°F)	0.5°C (1°F)

\*Accuracy, tolerance

Sources:

ASTM Designation E1-07: Standard Specification for ASTM Liquid-in-Glass Thermometers;

ASTM Designation E2251-11: Standard Specification for Liquid-in-Glass ASTM Thermometers with Low Hazardous Precision Liquid