

## Thermometric Equivalents

### Temperature Scales

Symbol	Designation	Zero point	Freezing point of water	Boiling point of water at standard atm pressure
°C	degree Celsius	freezing point of water	0 °C	100 °C
K	Kelvin or thermodynamic temperature based on the Celsius scale	absolute zero	273.15 K	373.15 K
°F	degree Fahrenheit	-17.8 °C	32 °F	212 °F
°Rank	degree Rankine or thermodynamic temperature based on the Fahrenheit scale	absolute zero	491.4 °Rank	671.4 °Rank

The following formulas may be used to convert temperatures from one scale to another:

Temperature given in	Temperature wanted in			
	°C	K	°F	°Rank
°C	°C	$^{\circ}\text{C} + 273.15$	$1.8\ ^{\circ}\text{C} + 32$	$1.8\ ^{\circ}\text{C} + 491.4$
K	$\text{K} - 273.15$	K	$1.8\ \text{K} - 459.4$	1.8 K
°F	$0.556\ ^{\circ}\text{F} - 17.8$	$0.556\ ^{\circ}\text{F} + 255.3$	°F	$^{\circ}\text{F} + 459.4$
°Rank	$0.556\ ^{\circ}\text{Rank} - 273.15$	$0.556\ ^{\circ}\text{Rank}$	$^{\circ}\text{Rank} - 459.4$	°Rank