

Technical Bulletin 0009

Subject: Temperature Correction Chart for Cu-CuSO₄, Zn-ZnSO₄, and Ag-AgCl Chemistries of Reference Electrodes

Reference Electrode Potentials at 25°C (77°F):

Reference Electrode Chemistry	To Protect Steel In Working Environments	Against Calomel Reference
Copper-Copper Sulfate - (Cu-CuSO ₄)	- 0.85 V	+ 0.076 V
Zinc-Zinc Sulfate - (Zn-ZnSO ₄)	+0.250 V	- 1.025 V
Silver-Silver Chloride - (Ag-AgCl)	-0.76 V	- 0.017 V
Calomel	-0.774 V	-----

Temperature Corrections for each degree centigrade above 25°C (77°F):

Reference Electrode Chemistry	Corrections
Copper-Copper Sulfate - (Cu-CuSO ₄)	Plus .9 mV per degree
Zinc-Zinc Sulfate - (Zn-ZnSO ₄)	Plus .5 mV per degree
Silver-Silver Chloride - (Ag-AgCl)	Plus .6 mV per degree
Calomel	minus .76 mV per degree