

Sigma PMV Resistivity Quick-Reference

Compiled from standard references (CRC/WEL via Wikipedia data page)

What the PMV number means: Sigma Metalytics PMV displays the material's *electrical resistivity* in $\mu\Omega \text{ cm}$ (i.e., $1 \mu\Omega \text{ cm} = 1 \times 10^{-8} \Omega \text{ m}$), typically referenced at $\sim 20\text{--}25^\circ\text{C}$. Readings vary with purity, temper, and temperature; use as a guide band, not an exact fingerprint.

Units: All values below are in $\mu\Omega \text{ cm}$ at about 293 K (20 °C). Pure elements are from CRC/WEL values as collated on the Wikipedia data page; a few common alloys are included with typical literature values.

Material	Symbol	Resistivity ($\cdot \text{cm}$ @ $\sim 293 \text{ K}$)	Source
Silver	Ag	1.59	CRC @ 293–298 K
Copper	Cu	1.68	CRC @ 293–298 K
Coin silver / 90% Ag	Alloy	2.08	Deringer-Ney (approx)
Gold	Au	2.21	WEL @ 293–298 K
Aluminium	Al	2.65	WEL @ 293–298 K
Sterling silver (Ag 92.5 / Cu 7.5)	Alloy	2.90	Typical literature (approx)
Calcium	Ca	3.36	LNG / CRC @ $\sim 293 \text{ K}$
Beryllium	Be	3.56	CRC @ 290–300 K
Rhodium	Rh	4.30	CRC @ 293–298 K
Magnesium	Mg	4.39	LNG / CRC @ $\sim 293 \text{ K}$
Iridium	Ir	4.70	CRC @ 293–298 K
Tungsten	W	5.28	LNG / CRC @ $\sim 293 \text{ K}$
Molybdenum	Mo	5.34	LNG / CRC @ $\sim 293 \text{ K}$
Zinc	Zn	5.90	LNG / CRC @ $\sim 293 \text{ K}$
Cobalt	Co	6.24	LNG / CRC @ $\sim 293 \text{ K}$
Cadmium	Cd	6.80	CRC @ 293–298 K
Nickel	Ni	6.93	LNG / CRC @ $\sim 293 \text{ K}$
Ruthenium	Ru	7.10	CRC @ 293–298 K
Indium	In	8.00	CRC @ 293–298 K
Osmium	Os	8.10	CRC @ 293–298 K
Iron	Fe	9.70	WEL @ 293–298 K
Platinum	Pt	10.60	LNG / CRC @ $\sim 293 \text{ K}$
Palladium	Pd	10.73	CRC @ 293–298 K
Tin	Sn	11.50	CRC @ 293–298 K
Chromium	Cr	12.50	LNG / CRC @ $\sim 293 \text{ K}$
Tantalum	Ta	13.50	LNG / CRC @ $\sim 293 \text{ K}$
Gallium	Ga	14.00	WEL @ 293–298 K
Niobium	Nb	15.20	CRC @ 293–298 K
Rhenium	Re	17.20	CRC @ 293–298 K
Vanadium	V	19.70	LNG / CRC @ $\sim 293 \text{ K}$
Lead	Pb	20.80	LNG / CRC @ $\sim 293 \text{ K}$
Uranium	U	28.00	CRC @ 293–298 K
Hafnium	Hf	33.10	LNG / CRC @ $\sim 293 \text{ K}$
Titanium	Ti	42.00	LNG / CRC @ $\sim 293 \text{ K}$
Zirconium	Zr	42.10	LNG / CRC @ $\sim 293 \text{ K}$
Manganin (Cu86Mn12Ni2)	Alloy	48.20	Typical
Constantan (Cu55Ni45)	Alloy	49.00	Typical
Yttrium	Y	59.60	CRC @ 290–300 K
Lanthanum	La	61.50	CRC @ 290–300 K
Stainless steel 304 (approx)	Alloy	69.00	Typical
Mercury (liquid)	Hg	96.00	WEL @ 293–298 K (liquid)
Bismuth	Bi	130.00	WEL @ 293–298 K

Sources: CRC Handbook / WebElements / Lange (via Wikipedia “Electrical resistivities of the elements (data page)”) for elements; typical datasheets and engineering references for listed alloys.