



Wide Range of Leaded and Lead-Free Solder Wires Available

MG Chemicals offers an extensive portfolio of solder wire designed to cover the needs of all users, from hobbyists to large manufactures. From traditional leaded solder to more advanced alloys that melt at higher temperatures, MG Chemicals offers a wide range of flux types, gauges and package sizes.

Features & Benefits

- Meets or exceeds J-STD-004B and J-STD-006C
- Multiple alloys, gauge sizes and fluxes available

Applications

- Hobbyist, prototyping and academic projects
- Manufacturing operations of all sizes

Available Sizes

Diameter	Gauge (AWG)
0.062" (1.57 mm)	16
0.050" (1.27 mm)	18
0.040" (1.01 mm)	19
0.032" (0.81 mm)	21
0.025" (0.63 mm)	23

Leaded Solder Wires

4870–4875 — Sn60/Pb40 No-Clean Solder wire

4890–4898 — Sn60/Pb40 RA Solder wire

4860–4865 — Sn63/Pb37 No-Clean Solder wire

4880–4888 — Sn63/Pb37 RA Solder wire

Lead-Free Solder Wires

4900 — SAC305 No-Clean Solder wire

4901 — Sn99 No-Clean Solder wire

49500WS — Sn100e Water Soluble Solder wire

LEADED SOLDER WIRES

LEAD-FREE SOLDER WIRES

	4870-4875	4890-4898	4860-4865	4880-4888	4900	4901	49500WS
PROPERTIES							
Flux Classification	RELO	ROM1	RELO	ROM1	RELO	RELO	ORH1
Flux Type	Resin	Rosin	Resin	Rosin	Resin	Resin	Organic
Flux Activity	Low	Moderate	Low	Moderate	Low	Low	High
Copper Mirror	No removal	—	No removal	—	No removal	No removal	—
Corrosion Test	Pass	Pass	Pass	Pass	Pass	Pass	—
Electromigration	Pass	—	Pass	—	Pass	Pass	—
Silver Chromate Cl ⁻ + Br	Pass	Detection	Pass	Detection	Pass	Pass	Detection
Flux Residue Dryness	Pass	—	Pass	—	Pass	Pass	—
Acid Number (mgKOH/g sample)	100	150-160	190-210	150-160	190-210	190-210	180-200
Softening Point of Flux Extract	24 °C	80 °C	24 °C	80 °C	24 °C	24 °C	60 °C
Solder Spread	130 mm ²	—	130 mm ²	N/A	130 mm ²	130 mm ²	—
Splitting of Flux-Cored Wire Solder	0.30%	—	0.30%	N/A	0.30%	0.30%	—
Halides (by weight)	<0.05%	0.5-0.2%	<0.05%	0.5-0.2%	<0.05%	<0.05%	>2%
Post Reflow Flux Reside	45%	N/A	55%	—	55%	55%	—
Surface Insulation Resistance (SIR)	2.4 x 10 ¹⁰ Ω	>1.0 x 10 ⁹ Ω	2.3 x 10 ¹¹ Ω	>1.0 x 10 ⁹ Ω	2.3 x 10 ¹¹ Ω	2.3 x 10 ¹¹ Ω	>1.0 x 10 ⁹ Ω
Bellcore (Telecordia)	4.1 x 10 ¹⁰ Ω	—	6.1 x 10 ¹¹ Ω	—	6.1 x 10 ¹¹ Ω	6.1 x 10 ¹¹ Ω	—
Cleaning	No-clean	Required	No-clean	Required	No-clean	No-clean	Required

AVAILABLE PACKAGING

Net contents	4870-18G 4875-227G 4875-454G	4890-18G 4894-227G 4894-454G 4895-227G 4895-454G 4896-227G 4897-227G 4898-227G 4898-454G	4860-18G 4865-227G 4865-454G	4880-18G 4884-227G 4884-454G 4885-227G 4885-454G 4886-227G 4886-227G 4887-227G 4887-454G 4888-227G 4888-454G	4900-18G 4900-112G 4900-227G 4900-454G	4901-112G 4901-227G 4901-454G	49500WS-454G
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