

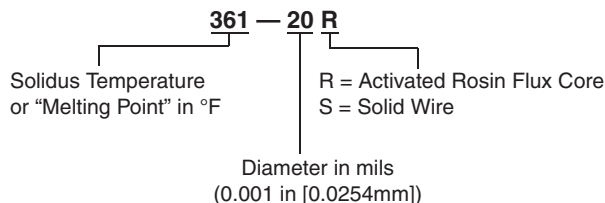
## Solders, Fluxes, Kits, and Soldering Units

The quality of the solder joints is a critical element in the performance of any strain gage installation. Because of special requirements associated with strain gage circuitry, many commercial solders and fluxes are not satisfactory for

this purpose. Micro-Measurements stocks and distributes a selection of solders and fluxes that have been carefully tested and qualified for use with strain gages.

### SOLDERS

Strain gage solders are listed below, along with their compositions, principal properties, and recommended applications. For ordering purposes, the solders are specified according to the coding system shown at right. All solders are supplied on spools, except for the 1240-FPA paste, which is supplied in a jar.



SOLDER SELECTION CHART							
Solder Type See Note 1	Packaging		Solidus/ Liquidus- Temperature	Wetting & Flow	Mech. Strength	Electrical Conductivity	Corrosion Resistance
	Order No.	Unit Size					
361A-20R 63% Tin 36.65% Lead 0.35% Antimony	361A-20R-25	25ft [7.6m]	361°/361°F [183°/183°C]	Excellent	Very Good	High	Good
	361A-20R	1lb [450g]					
Best all-around solder for general use. Also capable of use at cryogenic temperature.							
361-40R 63% Tin 37% Lead	361-40R-15	15ft [4.6m]	361°/361°F [183°/183°C]	Excellent	Very Good	High	Good
	361-40R	1lb [450g]					
General use with heavy leadwires. Not recommended for use at cryogenic temperatures.							
<b>430-20S</b> 96% Tin 4% Silver	430-20S-25	25ft [7.6m]	430°/430°F [221°/221°C]	Excellent	Very Good	Best	Excellent
	430-20S	1lb [450g]					
Recommended for use where high electrical conductivity is required. Good mechanical fatigue properties. Do not use at cryogenic temperatures.							
<b>450-20R</b> 95% Tin 5% Antimony	450-20R-25	25ft [7.6m]	450°/460°F [232°/238°C]	Excellent	Very Good	High	Good
	450-20R	1lb [450g]					
Higher temperature solder with very good handling properties. Can be used with M-Flux AR or M-Flux SS. Presence of antimony prevents "tin disease"; can be used in cryogenic environments, although quite brittle at low temperatures.							
<b>450-20S</b> 95% Tin 5% Antimony	450-20S-25	25ft [7.6m]	450°/460°F [232°/238°C]	Excellent	Very Good, Hard	High	Good
	450-20S	1lb [450g]					
Higher temperature solder with very good handling properties. Can be used with M-Flux AR or M-Flux SS. Presence of antimony prevents "tin disease", can be used in cryogenic environments, although quite brittle at low temperatures.							
570-28R 93.5% Lead 5% Tin 1.5% Silver	570-28R-20	20ft [6.1m]	565°/574°F [296°/301°C]	Very Good	Very Good, Hard	Fair	Fair
	570-28R	1lb [450g]					
High-lead content. For high-temperature connections and long-term use at cryogenic temperature.							
<b>1240-FPA</b> 40% Silver 28% Zinc 30% Copper 2% Nickel	1240-FPA	1oz [28g]	1220°/1435°F [660°/780°C]	Excellent	Excellent	High	Good
	For very-high-temperature solder joints, generally with WK-Series strain gages. The WRS-1 Resistance Soldering Unit is an ideal tool for use with this solder. Has a shelf life of 9 months.						

**Note 1:** Products shown in bold are RoHS compliant.