

FUEL GAS & MELTING TEMPERATURES

Fuel Gas	Temperature*	Characteristics
Acetylene	<i>Oxygen</i> 3300 °C	Highest flame temperature. Many torch options available. Produces carbon soot and cannot be used with Platinum. Must be purchased from a welding/gas supplier. Not sold in most hardware stores.
	<i>Air</i> 2600 °C	
Propane	<i>Oxygen</i> 2800 °C	Less expensive than acetylene and more readily available. Clean burning. Can be purchased in small disposable cylinders. Lower flame temperature than acetylene. Should not be stored indoors.
	<i>Air</i> 1950 °C	
Hydrogen	<i>Oxygen</i> 2650 °C	Relatively high flame temperature. Perfect for casting platinum because it's clean burning. Expensive and only available from specialty suppliers.
	<i>Air</i> 2050 °C	
MAPP®	2900 °C	Combination of liquefied petroleum gas and methylacetylene-propadiene. Readily available in small disposable cylinders. Clean burning and high temperature.
Natural Gas	2750 °C	Lower temperature. Safe and cost effective if you already have a natural gas hookup, but requires a professional to install.
Butane	1760 °C	Affordable and readily available. Small containers means it's very portable. Low temperature.

*Maximum flame temperature (values are approximate).

Metal	Symbol	Melting Point °C	Melting Point °F
Aluminum	Al	660 °C	1220 °F
Brass/Bronze		954 °C	1750 °F
Copper	Cu	1083 °C	1981 °F
Gold	Au	1063 °C	1945 °F
Iron/Steel	Fe	1539 °C	2802 °F
Lead	Pb	327 °C	621 °F
Nickel	Ni	1455 °C	2651 °F
Palladium	Pd	1555 °C	2831 °F
Platinum	Pt	1773 °C	3224 °F
Silver, Fine	Ag	961 °C	1761 °F
Silver, Sterling		893 °C	1640 °F
Tin	Sn	232 °C	450 °F
Zinc	Zn	419 °C	787 °F