

FUEL GAS & MELTING TEMPERATURES

Fuel Gas	Temperature*	Characteristics
Acetylene	<i>Oxygen</i> 3300° F	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° F	
Propane	<i>Oxygen</i> 2800° F	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° F	
Hydrogen	<i>Oxygen</i> 2650° F	Relatively high flame temperature. Perfect for casting platinum because it's clean burning. Expensive and only available from specialty suppliers.
	<i>Air</i> 2050° F	
MAPP®	2900° F	Combination of liquefied petroleum gas and methylacetylene-propadiene. Readily available in small disposable cylinders. Clean burning and high temperature.
Natural Gas	2750° F	Lower temperature. Safe and cost effective if you already have a natural gas hookup, but requires a professional to install.
Butane	1760° F	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