Contenti

Fuel Gas & Melting Temperatures

Fuel Gas		Temperature*	Characteristics
Acetylene	*Oxygen*	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.
	Air	2600˚F	
Propane	*Oxygen*	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.
	Air	1950˚F	
Hydrogen	*Oxygen*	2650˚F	Relatively high flame temperature. Perfect for casting platinum because it's clean burning. Expensive and only available from specialty suppliers.
	Air	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 ºC	Melting Point ºF
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