

Tips & Guidelines

- Neatness and accuracy count! If you messed up during one of the tests, redo it to get more accurate results, don't just accept your poor data.
- Go slow! Hurried measurements include lots of error. You must have accurate measurements to correctly identify your mystery substance.
- Make sure you are reading the scale on measuring devices accurately. Remember to estimate one decimal place beyond the graduation marks.

PHYSICAL PROPERTIES OF SOME COMMON SUBSTANCES					
Substance	Density (g/ml)	Freezing /		Solubility	
		Melting Point (°C)	Boiling Point (°C)	Water	Ethyl Alcohol
Acetic Acid	1.049	16.6	118.1	V	V
Acetone	0.792	-95.0	56.5	V	V
t-Butyl Alcohol	0.789	25.5	82.8	V	V
Cyclohexane	0.779	6.5	80.7	I	V
1,1-Dimethoxyethane	0.847	-113.0	64.5	S	V
Ethyl Alcohol	0.789	-117.0	78.5	V	V
Ethyl Acetate	0.901	-83.6	77.2	S	V
Ethyl propyl ether	0.747	-79.0	64.0	S	V
Ethylene glycol	1.113	-15.6	197.9	V	V
Methyl alcohol	0.796	-97.8	64.6	V	V
Methyl acetate	0.933	-98.1	57.1	S	V
Nitrobenzene	1.198	5.7	210.8	S	V
2-Pentyne	0.711	-109.3	56.0	I	V
2-Propanethiol	0.806	-130.7	60.0	S	V
1-Propyl alcohol	0.804	-127.0	97.2	V	V
2-propyl alcohol	0.785	-89.5	82.4	V	V
Toluene	0.867	-95.0	110.6	I	V
Trichlorotrifluoroethane	1.510	-35.0	47.6	I	V
Water	1.000	0.0	100.0	V	V