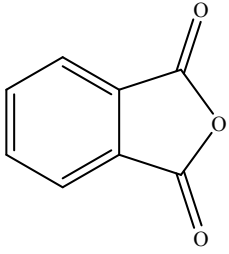


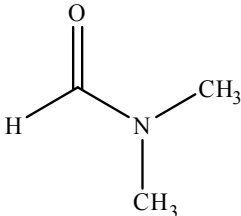
Appendix A

Table: Properties of phthalic anhydride

Properties	Descriptions
Appearances	White or pale yellow crystals
Molecular formula	$C_8H_4O_3$ 
Molecular weight	148.11 g/mol
Boiling point	295°C
Melting point	130.8°C
Vapor pressure	5.14×10^{-4} torr @ 25°C; 1 torr @ 96.5°C

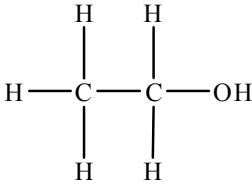
Appendix B

Table: Properties of DMF.

Properties	Descriptions
Appearances	Colorless to very slightly yellow liquid
Molecular formula	C_3H_7NO 
Molecular weight	73.09 g/mol
Boiling point	153 °C
Melting point	−61 °C
Vapor pressure	3.7 torr @ 25°C

Appendix C

Table: Properties of ethanol.

Properties	Descriptions
Appearance	colorless liquid
Molecular formula	C_2H_6O 
Molecular weight	46.07 g/mol
Boiling point	78.4 °C
Melting point	-114.3 °C
Flash Point	13 °C
Density	0.789 g/cm ³

Appendix D

Table: Solvents in solubility test.

Solvents	Chemical Formula	Boiling point, °C	Dielectric constant, ϵ , at 25 °C	Density, g/ml
<i>Polar Aprotic Solvents</i>				
DMF	$(\text{CH}_3)_2\text{NCHO}$	153	37.0	0.944
THF	$\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2$	66	7.5	0.886
DMAc	$(\text{CH}_3)_2\text{NCOCH}_3$	164	37.8	0.940
Pyridine	$\text{C}_5\text{H}_5\text{N}$	115	12.3	0.982
DMSO	$\text{CH}_3\text{SCOCH}_3$	189	46.7	1.092
Acetone	CH_3COCH_3	56	21.0	0.786
Ethyl Acetate	$\text{CH}_3\text{COOCH}_2\text{CH}_3$	77	6.0	0.894
Acetonitrile	CH_3CN	82	37.5	0.786
<i>Non-polar solvents</i>				
Chloroform	CHCl_3	61	4.8	1.498
Hexane	$\text{CH}_3(\text{CH}_2)_4\text{CH}_3$	69	1.88	0.655
Toluene	$\text{C}_6\text{H}_5\text{CH}_3$	111	2.4	0.867
<i>Polar Protic Solvents</i>				
Methanol	CH_3OH	65	33.0	0.791
Cyclohexanone	$\text{C}_6\text{H}_{10}\text{O}$	155	18.2	0.948
Acetic acid	CH_3COOH	118	6.2	1.049