

Organic Synthesis 4220, Dr. Laurie S. Starkey, Cal Poly Pomona
Common Names & Vocabulary

Using Google, Wikipedia or any other reference materials (CRC Handbook, an Aldrich catalog), provide structures for the following compounds:

diethyl ether (usually referred to as "ether")	ethanol (often referred to as "alcohol")
ligroin = petroleum ether = pet ether = light pet. a mixture of alkanes boiling 35–50 °C (mostly hexanes)	methylene chloride (dichloromethane)
acetone	ethyl acetate
benzene	dioxane
toluene	chloroform
<i>N,N</i> -dimethylformamide (DMF)	THF
acetonitrile	acetic anhydride
acetic acid	formaldehyde
acetaldehyde	acetylene
benzoic acid	phenol
aniline	pyridine

benzoyl chloride	allyl bromide
hydrazine	propargyl alcohol
benzyl alcohol	vinyl bromide

Translate the following abbreviations to the **full name & structure** each represents:

Hint: "Ac" = acetyl group = $-\text{COCH}_3$
 "Bn" = benzyl group = $-\text{CH}_2\text{Ph}$

PhCHO	EtOAc
BnBr	<i>t</i> -BuOH
Et ₂ O	LDA (lithium diisopropylamide)
AcOH	CH ₃ COCl
PhCO ₂ H	Ac ₂ O
<i>i</i> -PrOH	TsOH (<i>p</i> -toluenesulfonic acid, or tosic acid)
TBAF	MPMCl (<i>p</i> -methoxybenzyl chloride)
TMSCl	<i>i</i> BuOH