Naming Alcohols

STEP 1: Name the parent compound. Find the longest chain that has the hydroxyl substituent attached (replace the -e ending with -ol).

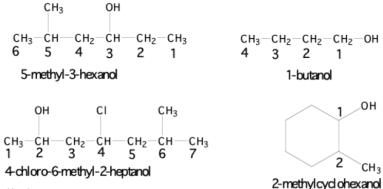
CH₃ (OH) Name as a *hexanol* a six-carbon chain containing a hydroxyl group.

STEP 2: Number the carbon atoms in the main chain. Begin at the end nearer the hydroxyl group, ignoring the location of other substituents.

In a cyclic alcohol, the carbon that bears the -OH group is #1.

STEP 3: Write the name, placing the number that locates the hydroxyl group immediately before the parent compound name.

In a cyclic alcohol the number "1" for the location of the –OH group is not needed.



Dialcohols, or diols, are often called glycols.

OH—CH₂—CH₂—OH

Ethylene glycol
(1,2-ethanediol)

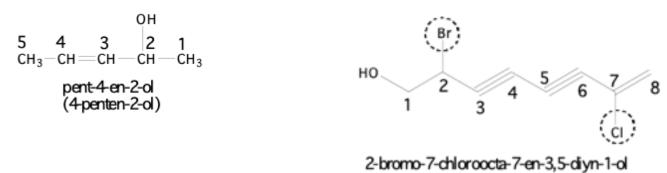
CH₃—CH—CH₂—OH

Propylene glycol
(1,2-propanediol)

When the molecule has more than one alcohol group, the complete alkane name is used as you can see here (names in parenthesis).

Unsaturated alcohols

Alcohol (hydroxyl) group takes precedence. Assign that carbon the lowest number.



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Chem 30B