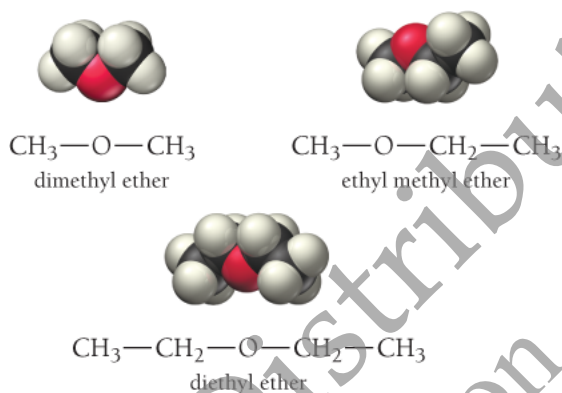


21.12: Ethers

Ethers are organic compounds with the general formula ROR. The two R groups may be identical or they may be different. Some common ethers are shown in Figure 21.13.

Figure 21.13 Ethers

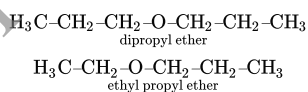


Naming Ethers

Common names for ethers have the format:

(R group 1) (R group 2) ether

If the two R groups differ, we use each of their names in alphabetical order. If the two R groups are the same, we use the prefix *di-*. Some examples include:



About Ethers

The most common ether is diethyl ether. Diethyl ether is a useful laboratory solvent because it can dissolve many organic compounds and it has a low boiling point (34.6 °C). The low boiling point allows for easy removal of the solvent. Diethyl ether was used as a general anesthetic for many years. When inhaled, diethyl ether depresses the central nervous system, causing unconsciousness and insensitivity to pain. Its use as an anesthetic has decreased in recent years because other compounds have the same anesthetic effect with fewer side effects (such as nausea).

Not for Distribution