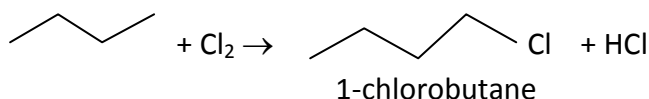
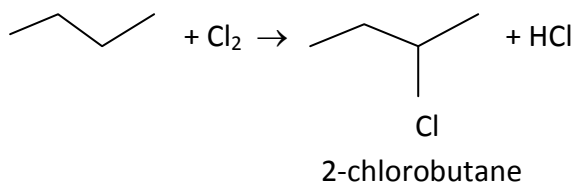


Answer on Question #81592, Chemistry / Organic Chemistry

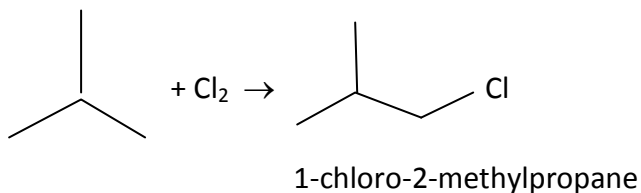
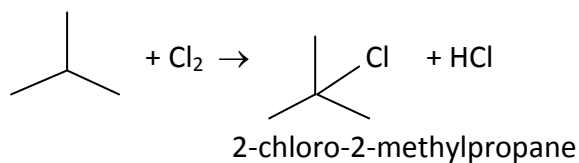
How many monochlorinated compounds of molecular formula C_4H_9Cl can be made by chlorinating butane and isobutane? what are they?

Answer

1. Monochlorinated compounds of molecular formula C_4H_9Cl made by chlorinating butane:
 $C_4H_{10} + Cl_2 \rightarrow C_4H_9Cl + HCl$



2. Monochlorinated compounds of molecular formula C_4H_9Cl made by chlorinating isobutane:
 $C_4H_{10} + Cl_2 \rightarrow C_4H_9Cl + HCl$



So, there are four monochlorinated compounds of molecular formula C_4H_9Cl made by chlorinating butane and isobutene:

- 1) 2-chlorobutane
- 2) 1-chlorobutane
- 3) 2-chloro-2-methylpropane
- 4) 1-chloro-2-methylpropane