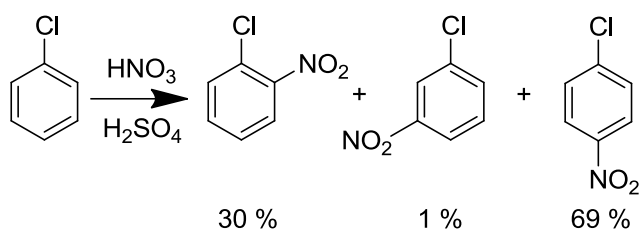


Answer on Question #49863 – Chemistry - Organic Chemistry

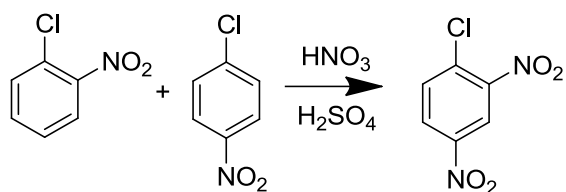
What are the three major compounds created by the nitration of chlorobenzene when it is at high temperature?

Solution:

The rate of nitration of chlorobenzene is about 30 times slower than that of benzene.



At high temperatures, may undergo further nitration of the two major products of the mononitration reaction:



So the three major compounds created by the nitration of chlorobenzene are 1-chloro-2-nitrobenzene, 1-chloro-4-nitrobenzene and 1-chloro-2,4-dinitrobenzene.

Answer:

1-chloro-2-nitrobenzene, 1-chloro-4-nitrobenzene and 1-chloro-2,4-dinitrobenzene