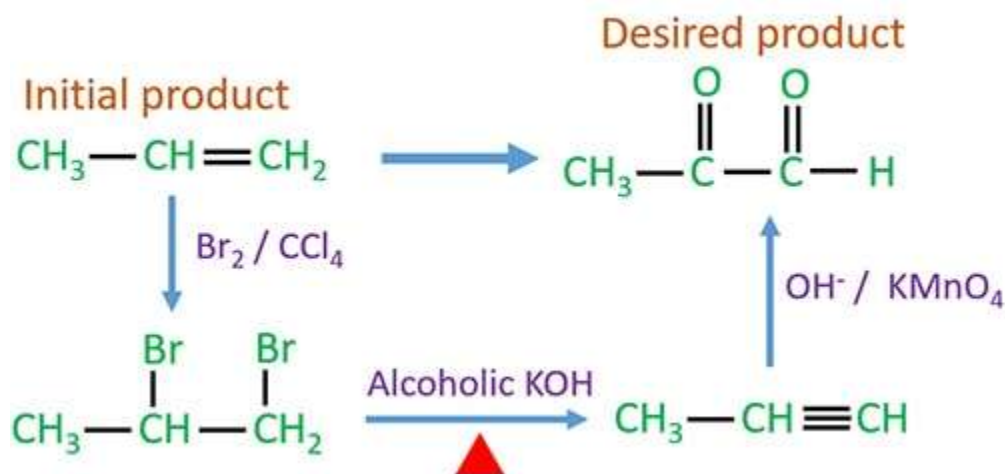


CHEMISTRY SCHOOL

chemistryscl.com

Organic Chemistry Conversions Examples, Questions and Answers

Converting one organic compound to another organic compound using one or more other organic compounds or reagents by a single or multiple steps is called organic conversion.



What will you learn and what you need?

You can check your knowledge about organic compounds and their reactions from organic conversions questions. Doing lot of organic conversions will help you to get remembered those organic chemistry.

In this tutorial,

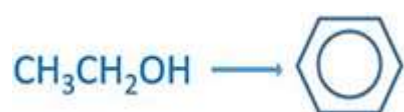
1. We give you **questions list** if you are familiar with organic chemistry conversion exercises.
2. Full introduction to organic chemistry conversion if you are new to these problems.

Organic conversion problems

Here, we have listed a lot of exercises for you. Try to do them yourself.

Answers are available on following link.

<https://www.chemistryscl.com/advancedlevel/organic/conversions/main.html>



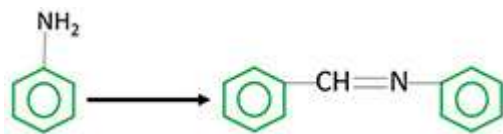
Ethanol to benzene



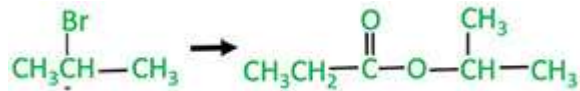
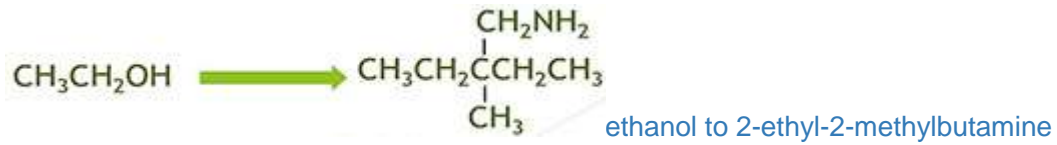
Acetylene to ethanol



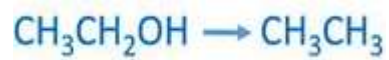
Ethanol to ethyl 2-enbutanoate



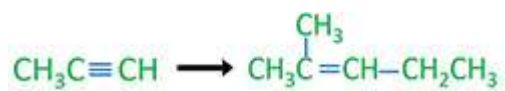
Preparing imine from aniline



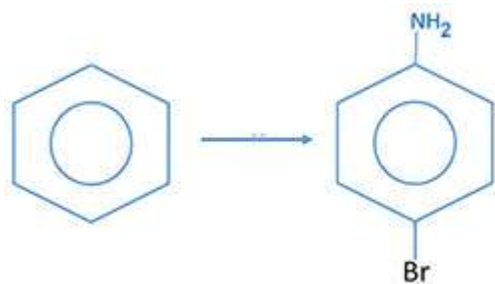
2-bromopropane to ester



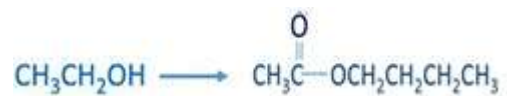
Ethanol to ethane



Prepare 2-methyl-2-pentene from propyne



benzene to 4-bromoaniline



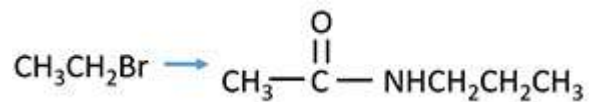
Ethanol to butyl ethanoate



Propene to 5-methyl-2-pentyne



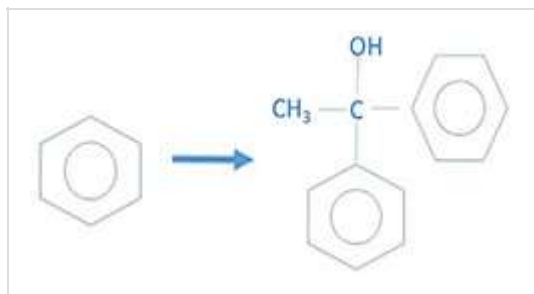
Ethanol to ethoxy ethane



ethylbromide to N-propylethanamide



Ethanol to butanoic acid



Benzene to 1-Diphenylethanol



Ethanol to butane



Ethanol to butanol



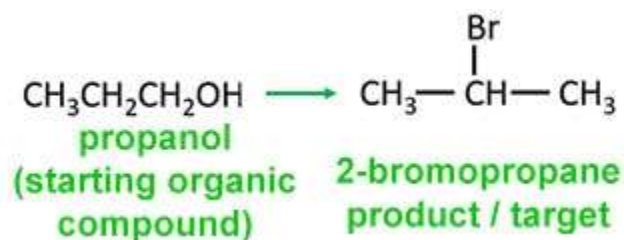
Ethanol to ethanoic acid

Organic chemistry conversion examples

Organic chemistry example 1

Convert propanol to 2-bromopropane

In this example, our target is preparing 2-bromopropane from propanone. First thing we have to do is, identifying the our starting compound (propanol) and final product (2-bromopropane).



1. We can see, both propanol and 2-bromopropane contain three carbon atoms.
2. propanol is an alcohol and 2-bromopropane is an alkyl halide compound.
3. For preparing 2-bromopropane, we have to go several steps. Adding one more reagents to propanol and take a different product. Then that product and another reagent react to give another product.

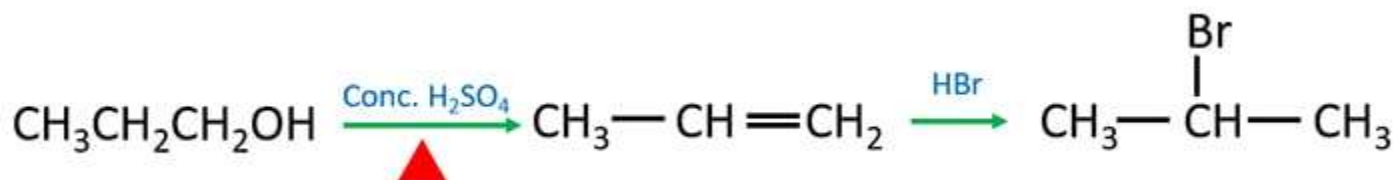
Steps of converting propanol to 2-bromopropane are given below.

Preparing 2-bromopropane from propanol only takes two steps.



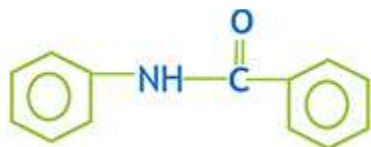
Then, we have to choose correct reagents for each step.

1. Heating concentrated H_2SO_4 with propanol give propene
2. Propene reacts with HBr to give our product 2-bromopropane.



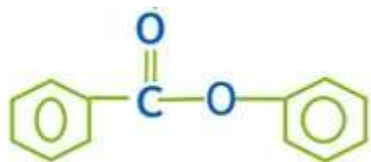
Organic conversion example 2

Prepare phenyl phenylmethanoate by following amide.



First, we should identify what is the our product. Phenyl phenylmethanoate is an ester compound.

phenyl phenylmethanoate



How an ester compound is prepared?

1. Reaction of carboxylic acid halide and alcohols
2. Reaction of carboxylic acid and alcohols in the presence of concentrated H_2SO_4 acid.

Method 1, reaction of carboxylic acid halide and alcohols is the best way to prepare esters.

Therefore we have to synthesis an alcohol and a carboxylic acid chloride from given amide.

Amide hydrolyzes

Hydrolysis of amide can be done by two ways.

1. By concentrated H_2SO_4
2. By concentrated NaOH

In this example we choose conc. NaOH to hydrolysis of amide.

