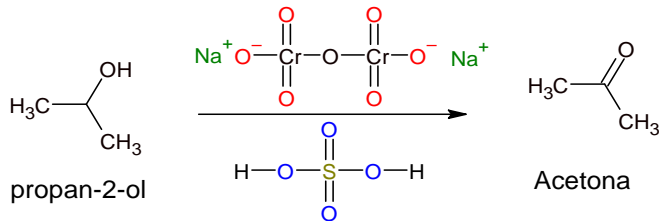


Apoyo 2do Departamental | ESIQIE 21/1 |

👉 Síntesis de **Cetonas** | Mecanismos

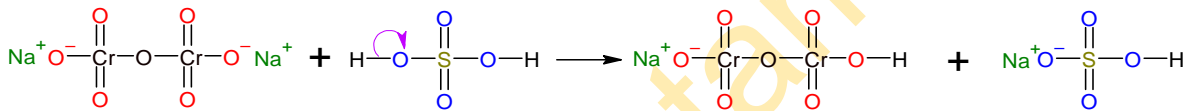
1. Oxidación con Mezcla Sulfocrómica

Oxidación de alcoholes 2°

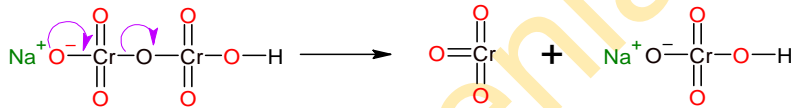


Mecanismo

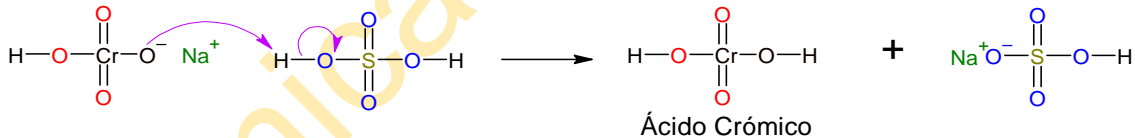
Paso 1



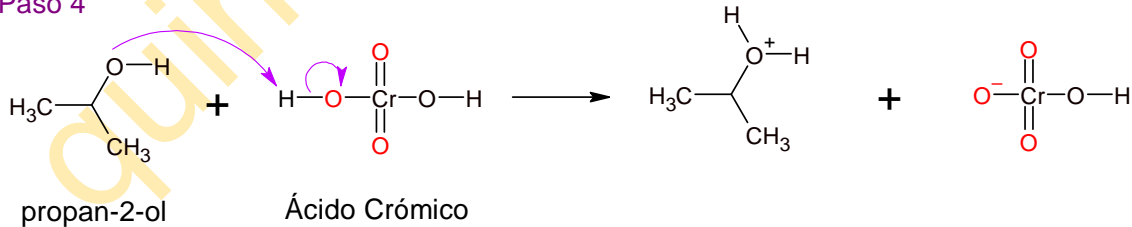
Paso 2



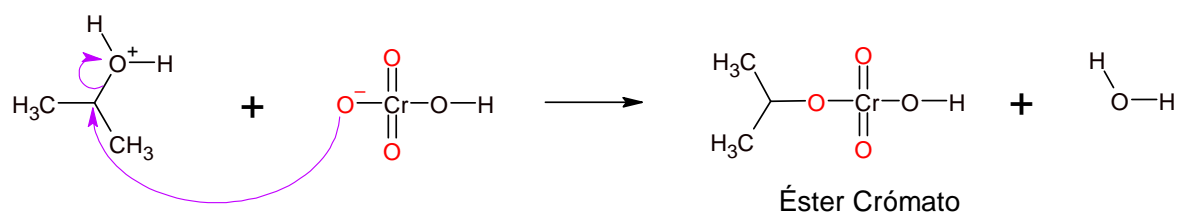
Paso 3



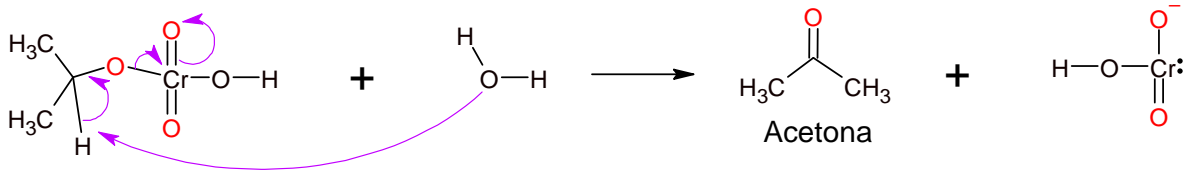
Paso 4



Paso 5

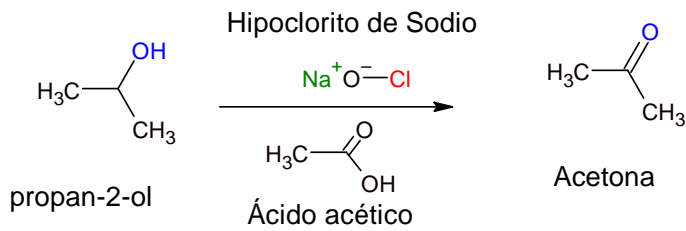


Paso 6



2. Oxidación con Hipoclorito de Sodio

Oxidación de alcoholes 2°



Mecanismo

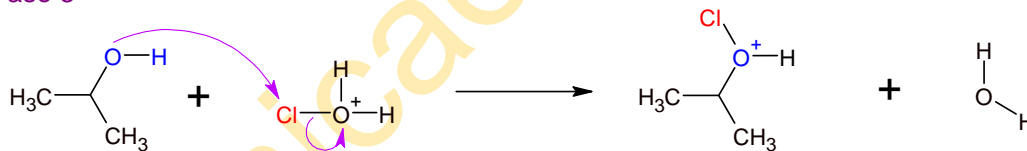
Paso 1



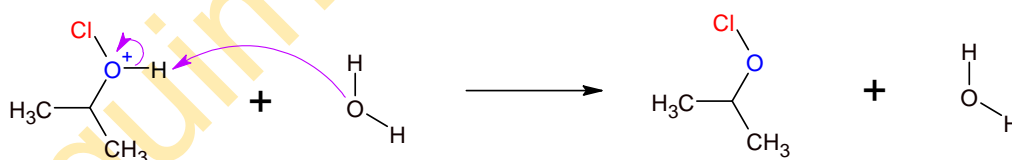
Paso 2



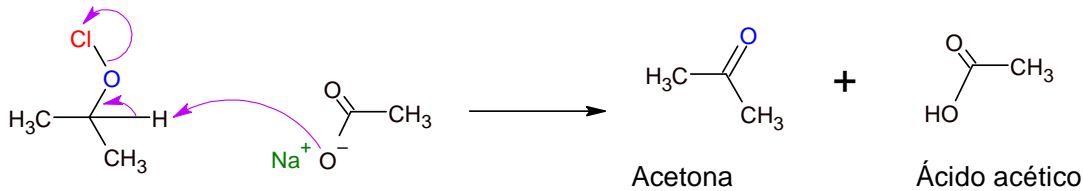
Paso 3



Paso 4

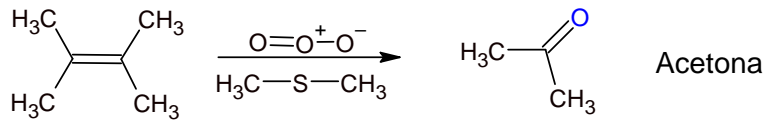


Paso 5

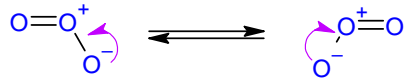


3. Ozonólisis

Ruptura en Condiciones Reductivas de un Alqueno

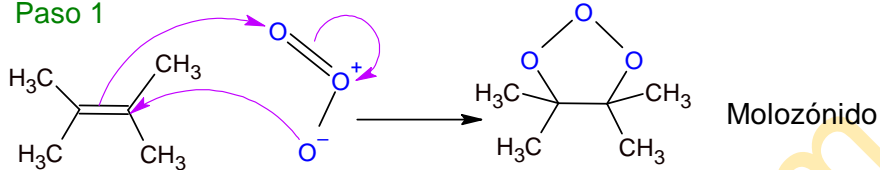


Estructuras de resonancia del OZONO

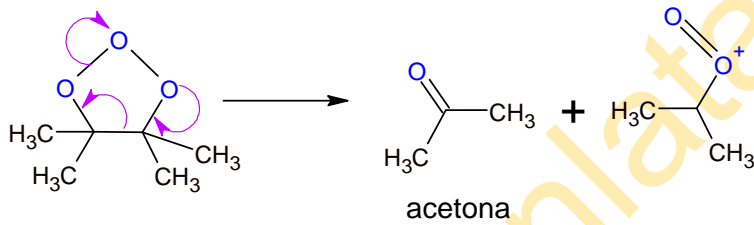


Mecanismo

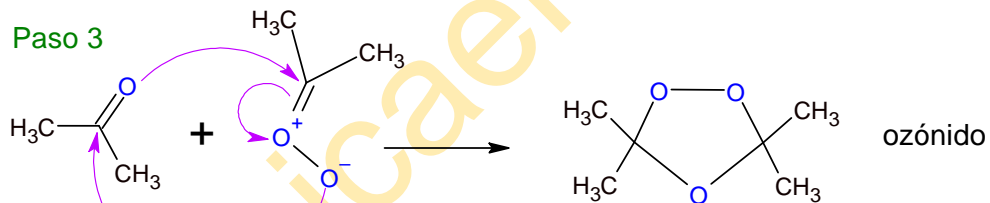
Paso 1



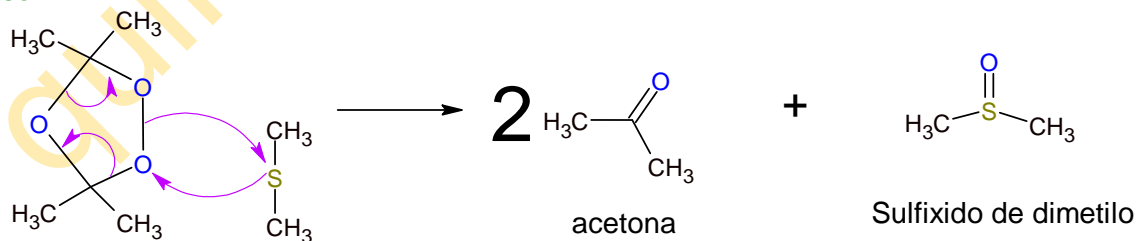
Paso 2



Paso 3

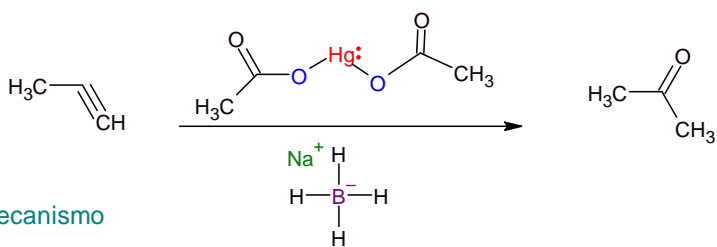


Paso 4



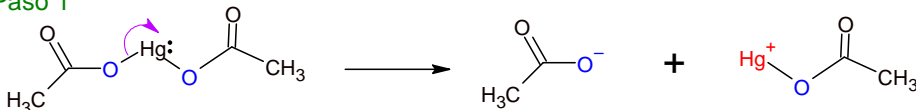
4. Oximercuración – Reducción

Oximercuración-Reducción de Alquinos

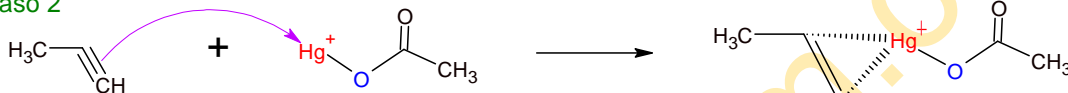


Mecanismo

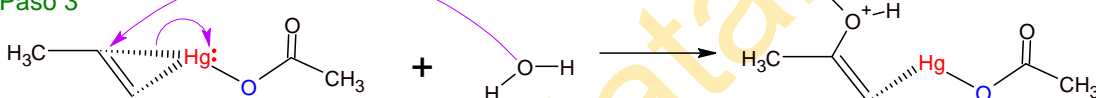
Paso 1



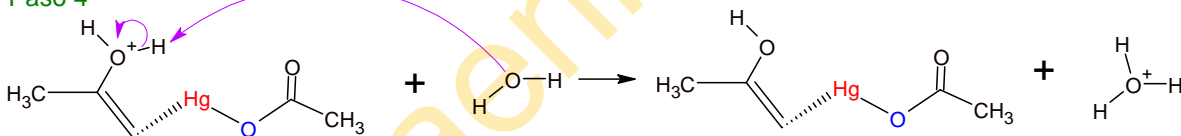
Paso 2



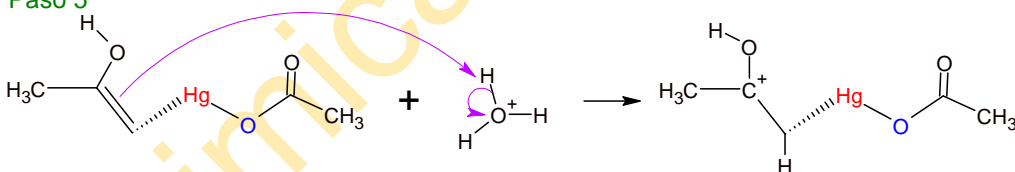
Paso 3



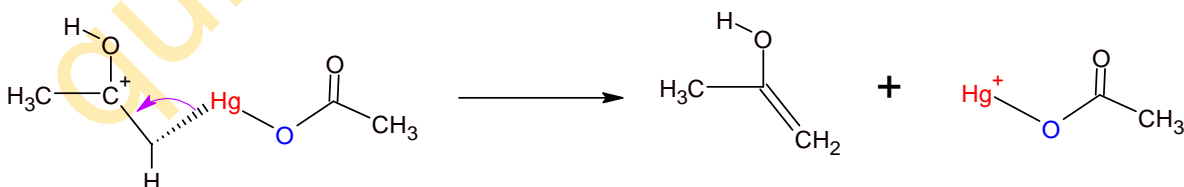
Paso 4



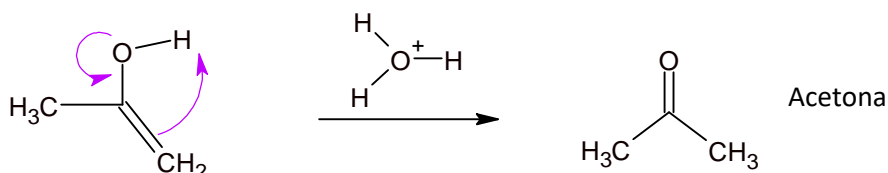
Paso 5



Paso 6

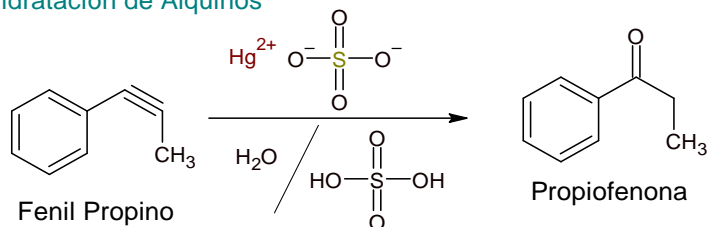


Paso 7 | Tautomeria



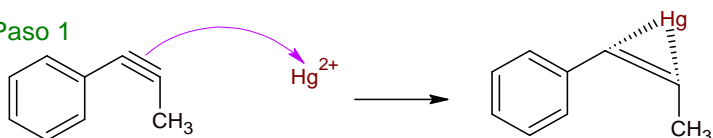
5. Hidratación de Alquinos

Hidratación de Alquinos

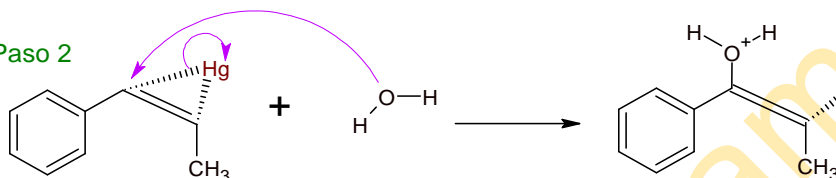


Mecanismo

Paso 1



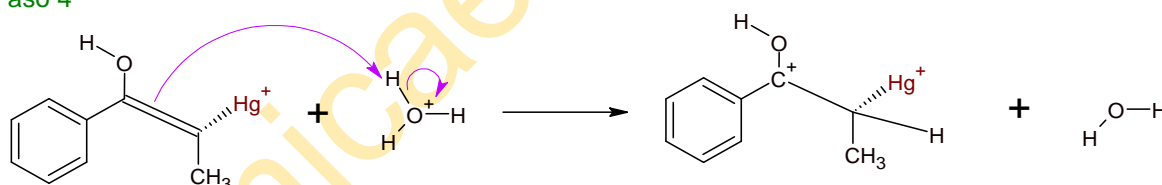
Paso 2



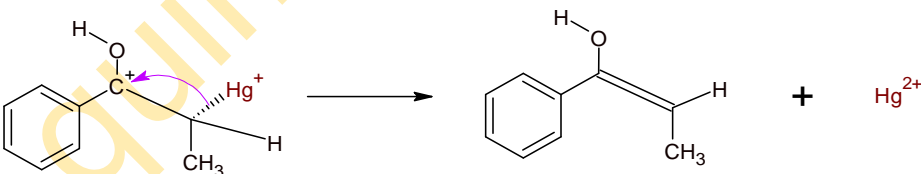
Paso 3



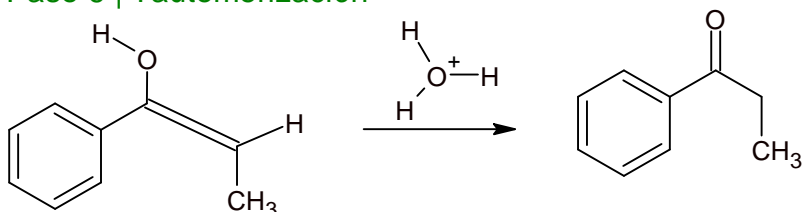
Paso 4



Paso 5

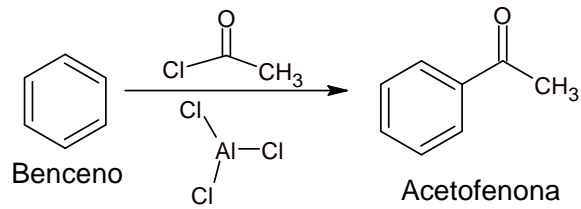


Paso 6 | Tautomerización



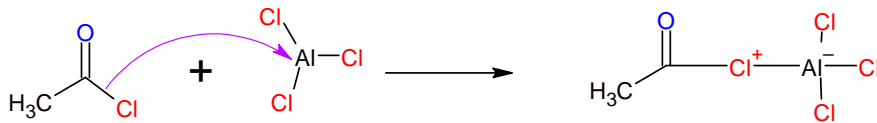
6. Acilación de Friedel – Crafts

Acilación de Friedel Crafts

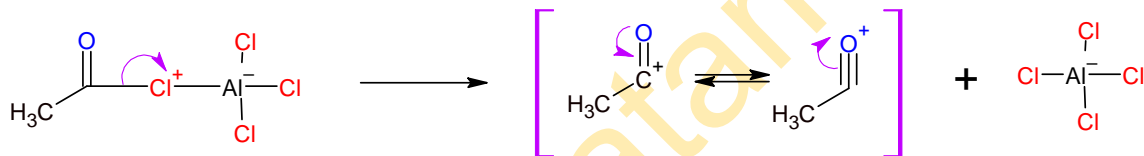


Mecanismo

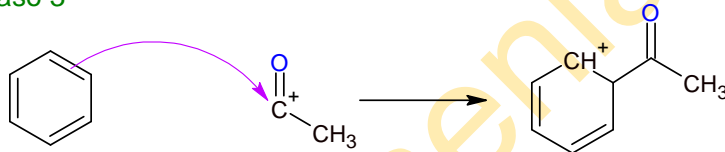
Paso 1



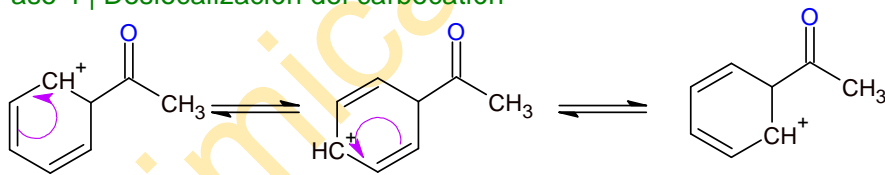
Paso 2



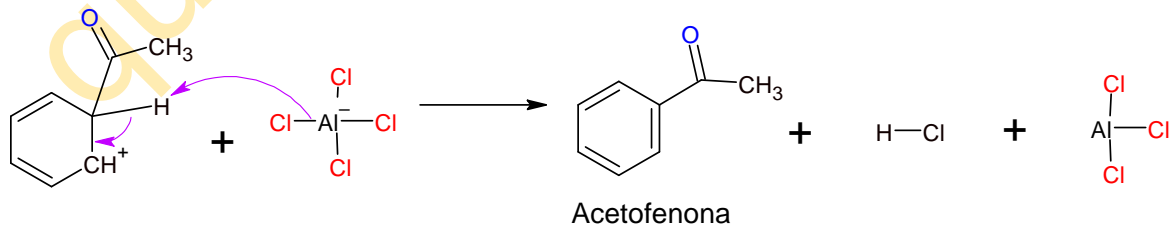
Paso 3



Paso 4 | Deslocalización del carbocatión

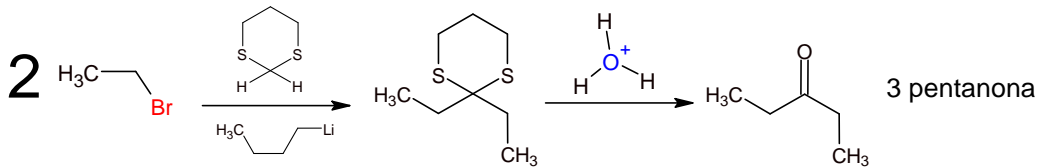


Paso 5 | Reconstrucción del Anillo



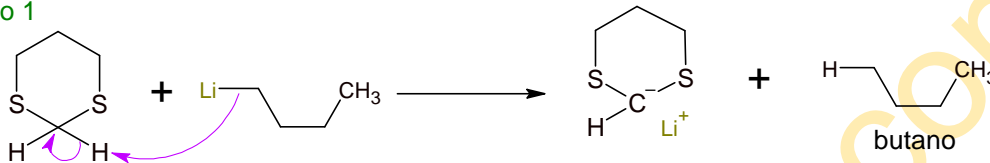
7. Síntesis de Cetonas a partir del 1,3 – Ditiano

Alquilación del 1,3 Ditiano

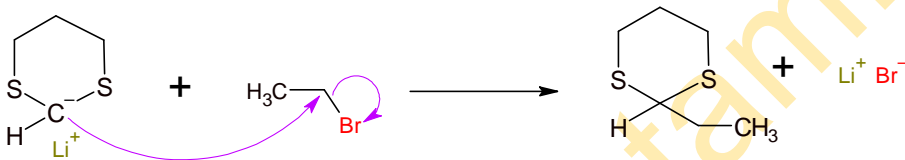


Mecanismo

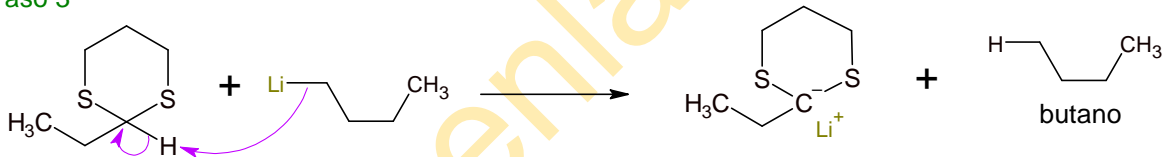
Paso 1



Paso 2



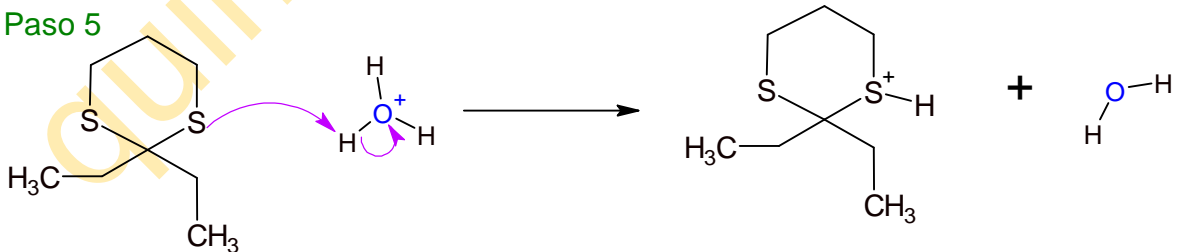
Paso 3



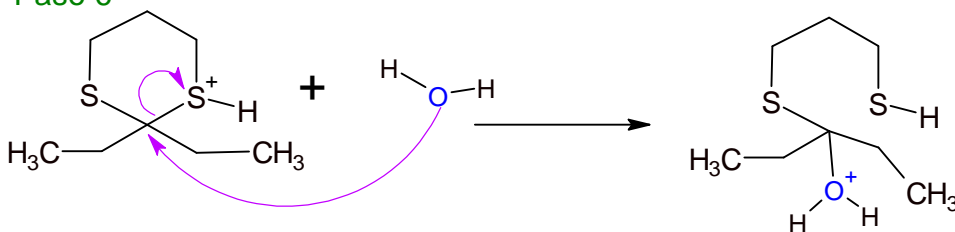
Paso 4



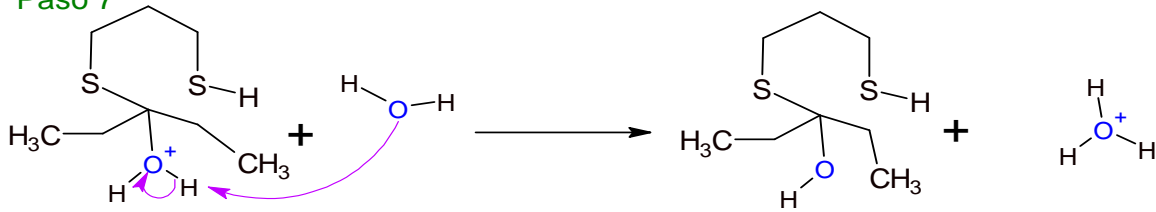
Paso 5



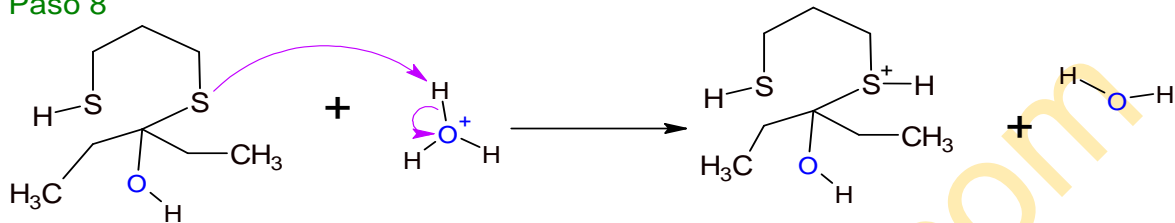
Paso 6



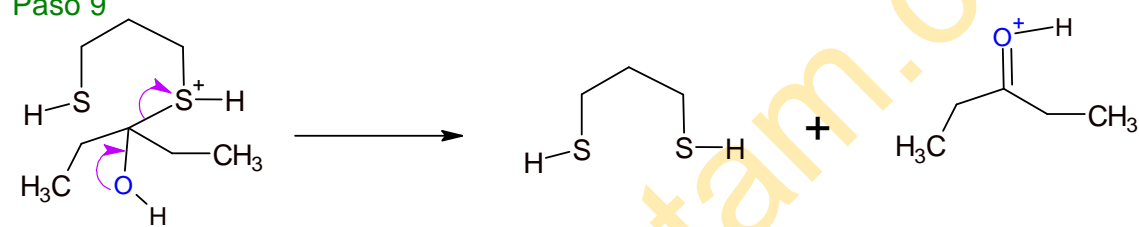
Paso 7



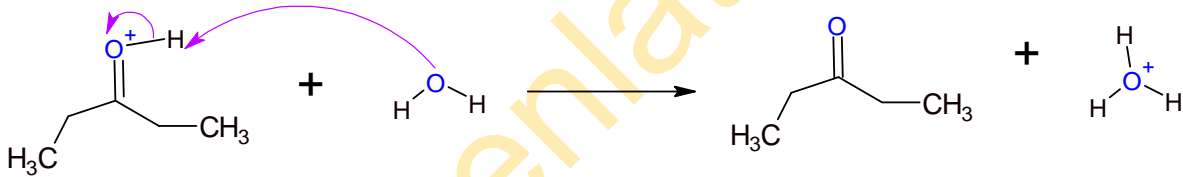
Paso 8



Paso 9



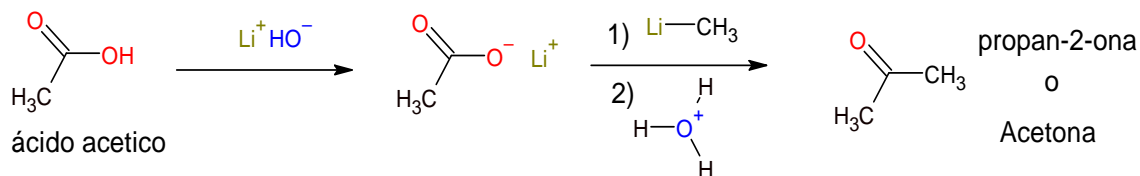
Paso 10



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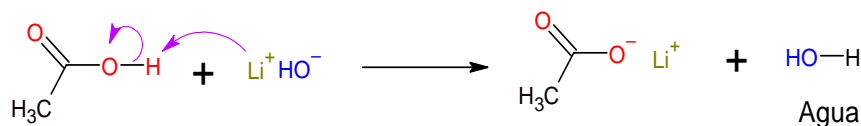
8. Síntesis de Cetonas a partir de Ácidos Carboxílicos con un alquil litio

Cetonas a partir de ácidos carboxílicos

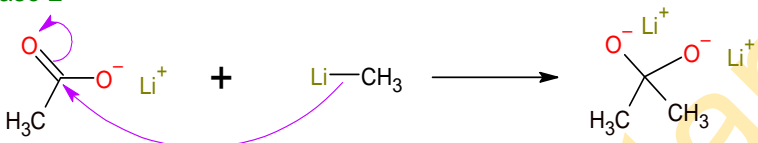


Mecanismo

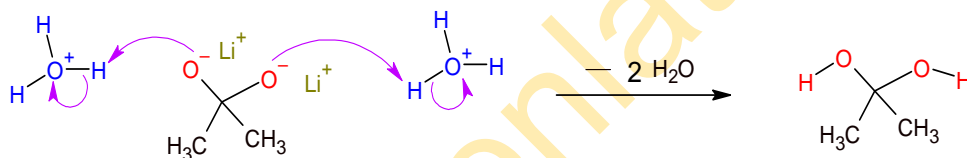
Paso 1



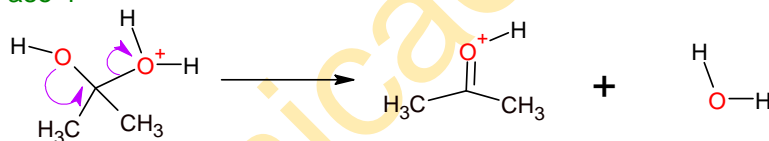
Paso 2



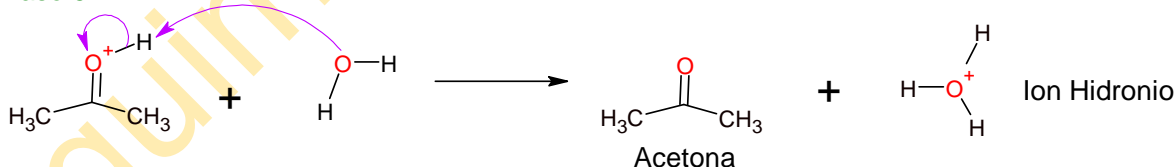
Paso 3



Paso 4

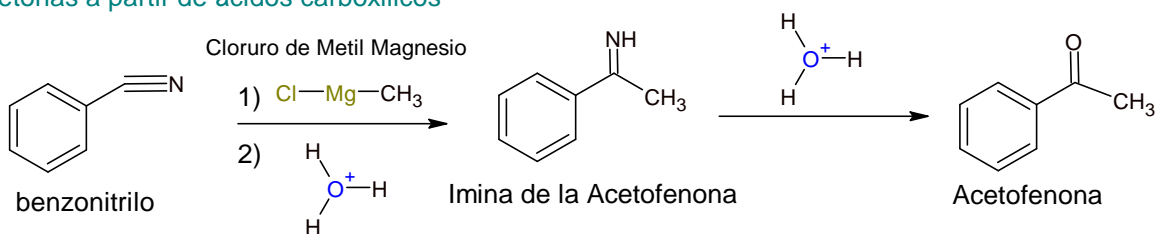


Paso 5



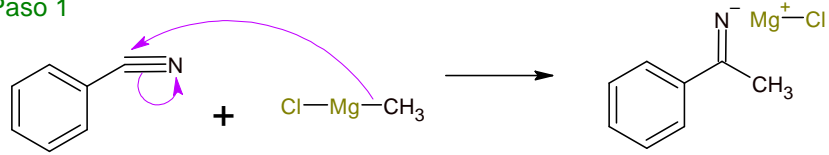
9. A partir de Nitrilos vía Grignard

Cetonas a partir de ácidos carboxílicos

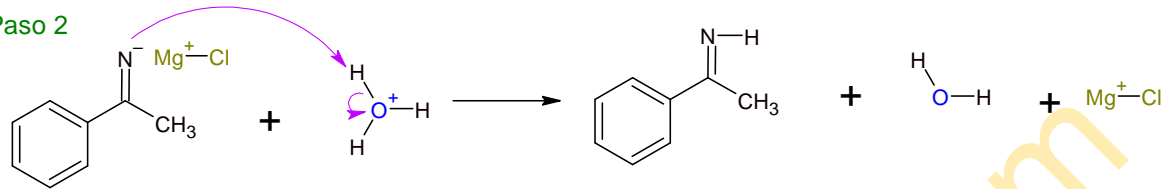


Mecanismo

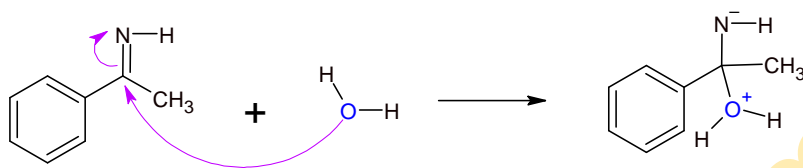
Paso 1



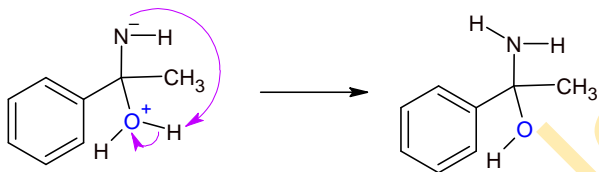
Paso 2



Paso 3



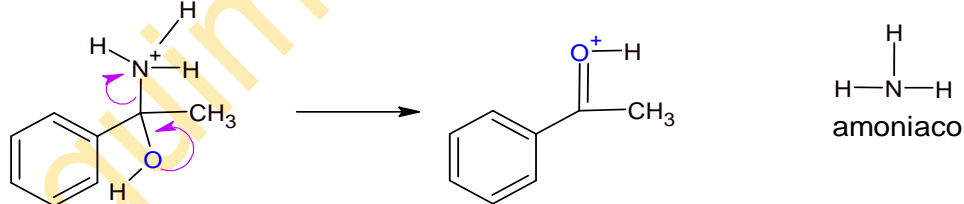
Paso 4



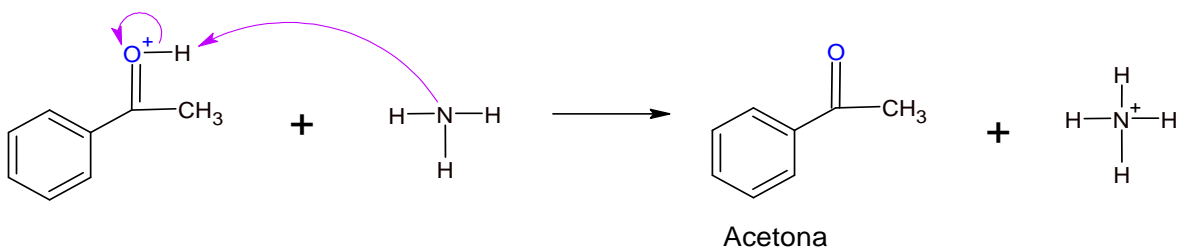
Paso 5



Paso 6

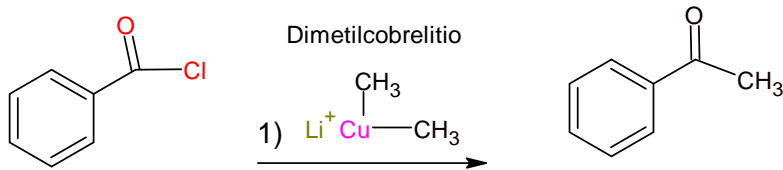


Paso 7



10. A partir de Cloruros de Ácido

Cetonas a partir de ácidos carboxílicos

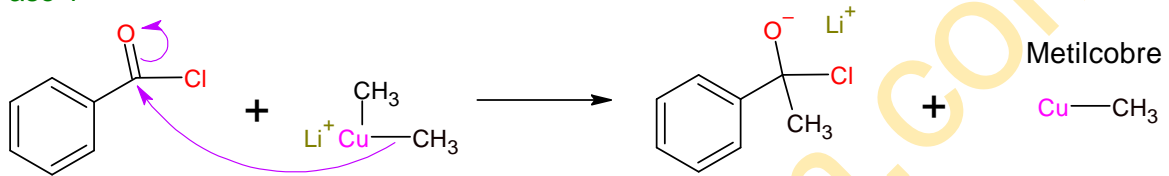


Cloruro de Benzoilo

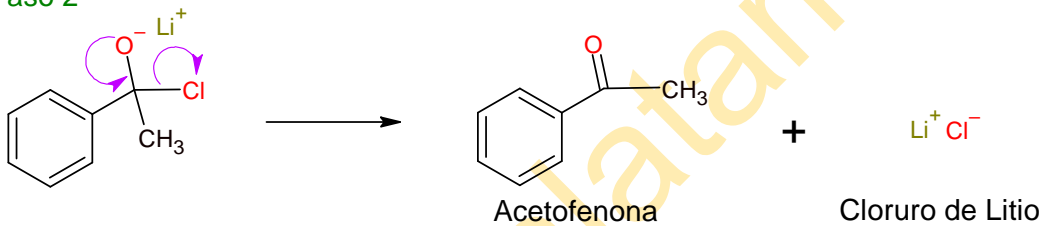
Acetofenona

Mecanismo

Paso 1

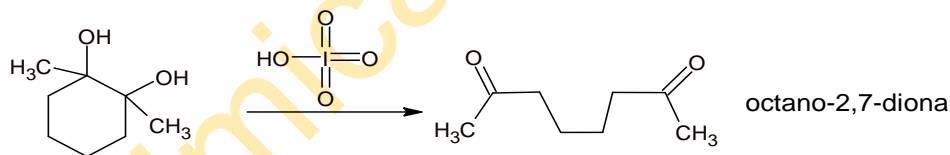


Paso 2



11. Ruptura de Dioles mediante el HIO_4

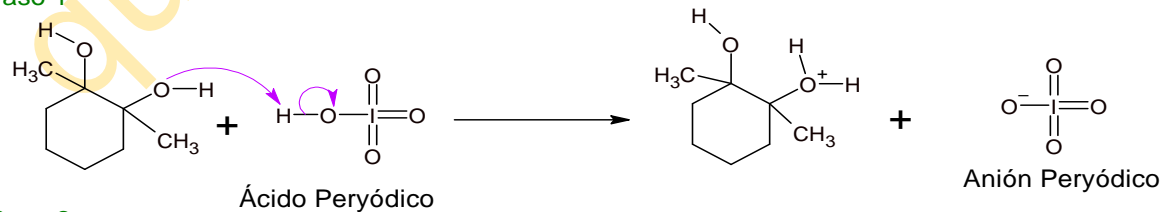
Ruptura de glicoles por Ácido Peryódico



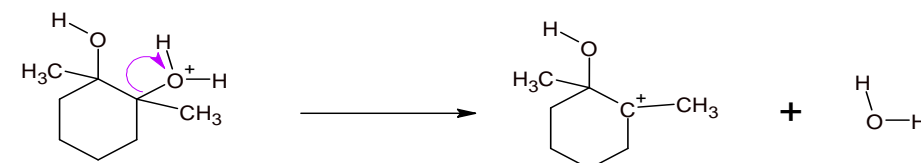
1,2-dimetilciclohexano-1,2-diol

Mecanismo

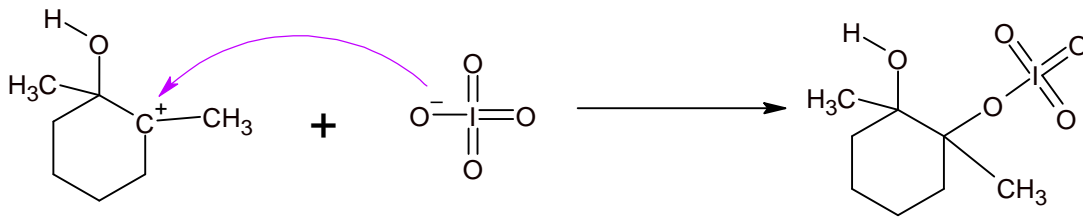
Paso 1



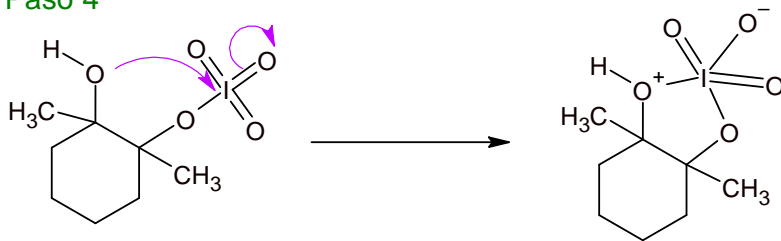
Paso 2



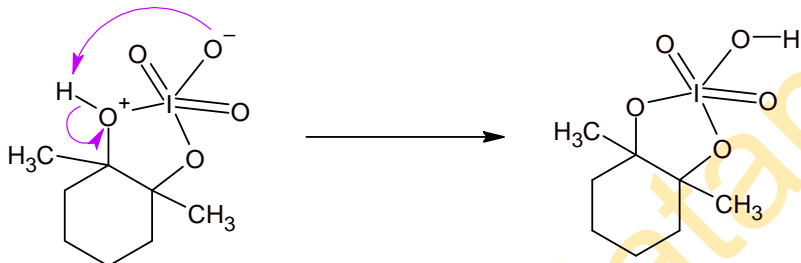
Paso 3



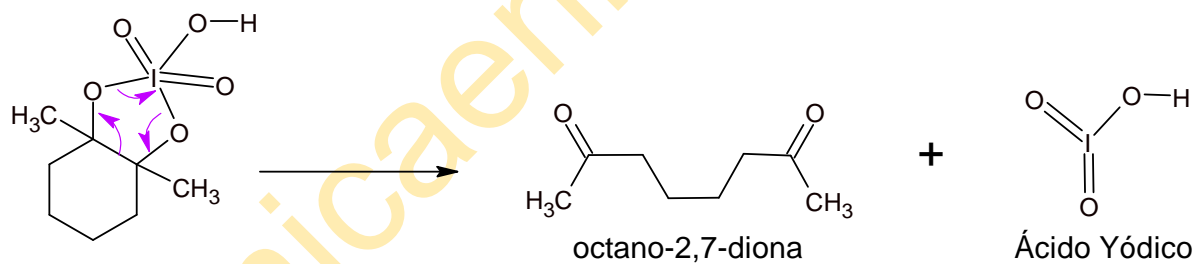
Paso 4



Paso 5



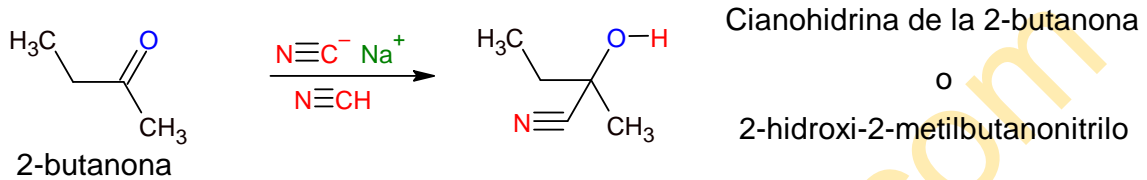
Paso 6



Reacciones de los Cetonas | Mecanismos

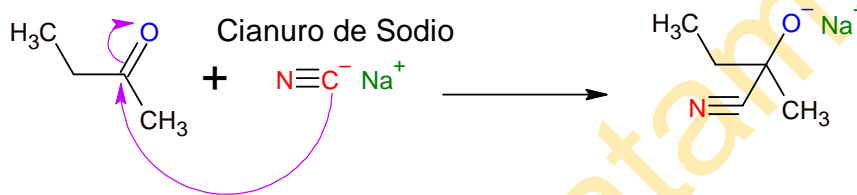
1. Formación de Cianohidrinas

Formación de Cianohidrinas

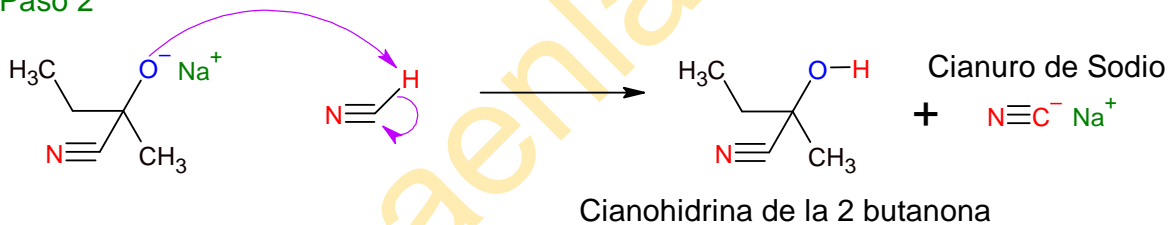


Mecanismo

Paso 1

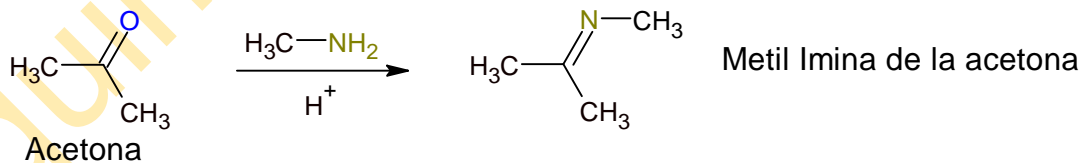


Paso 2



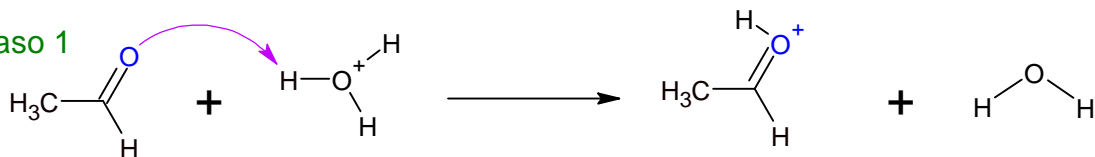
2. Formación de Iminas*

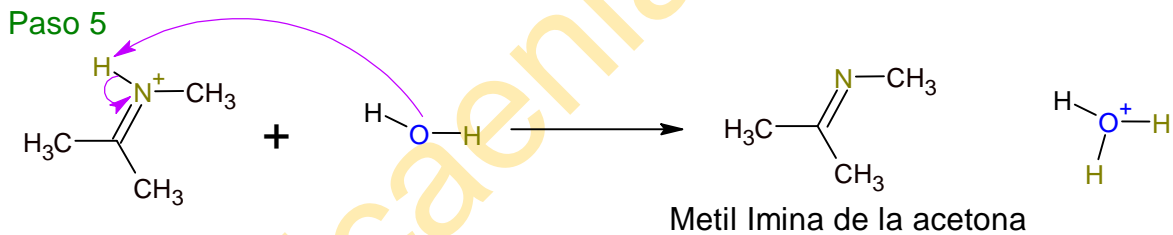
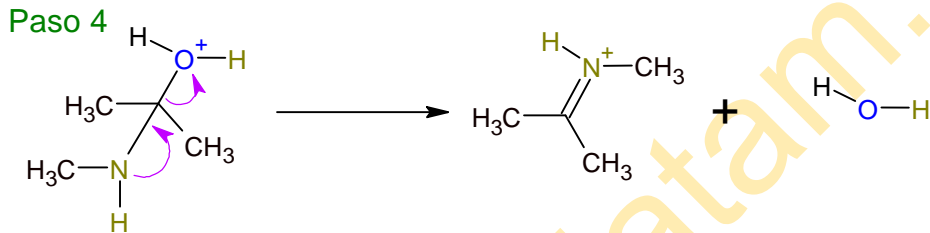
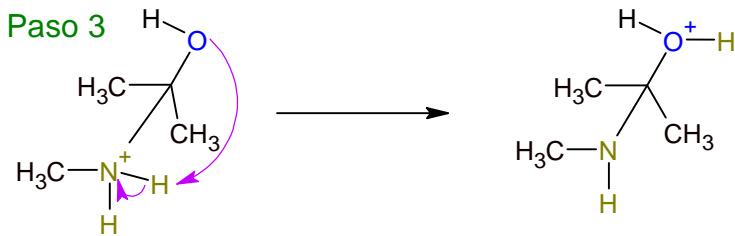
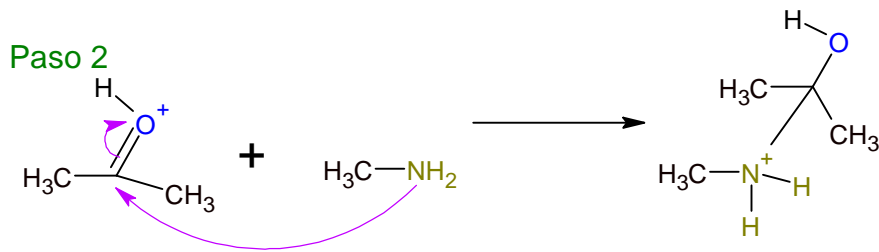
Formación de Cianohidrinas



Mecanismo

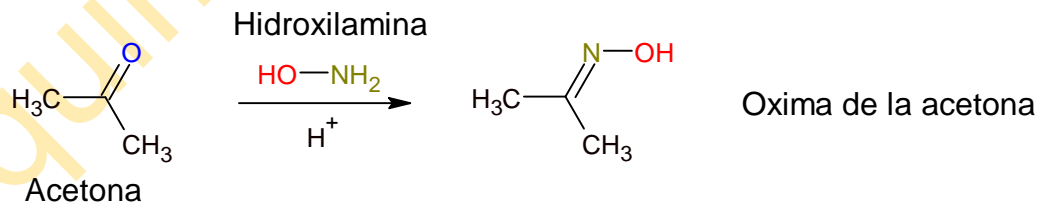
Paso 1



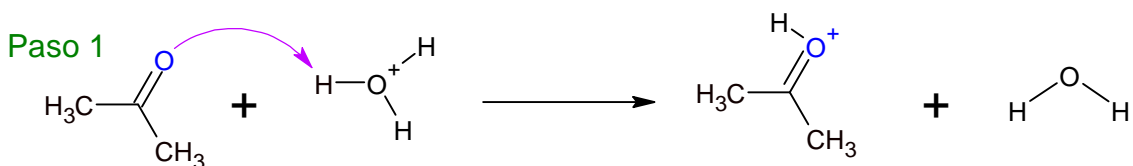


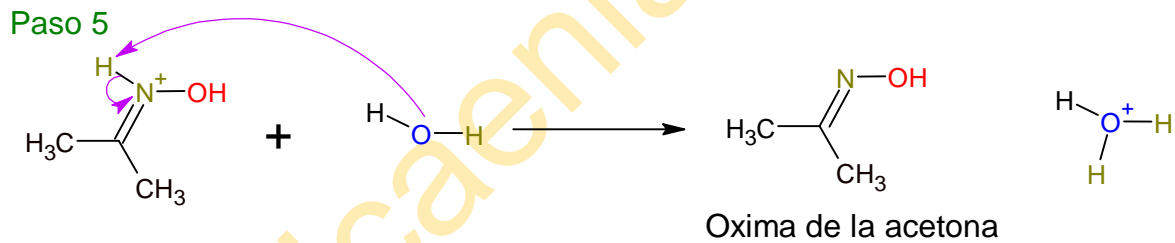
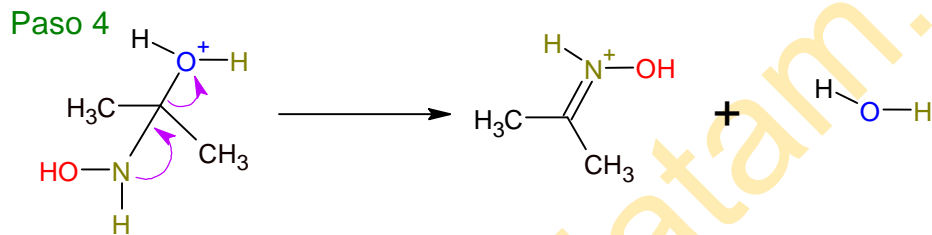
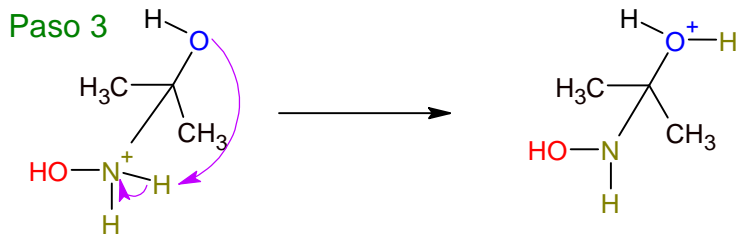
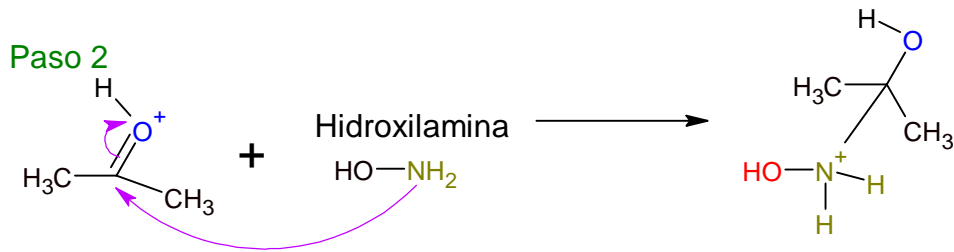
3. Formación de Oximas

Formación de Oximas



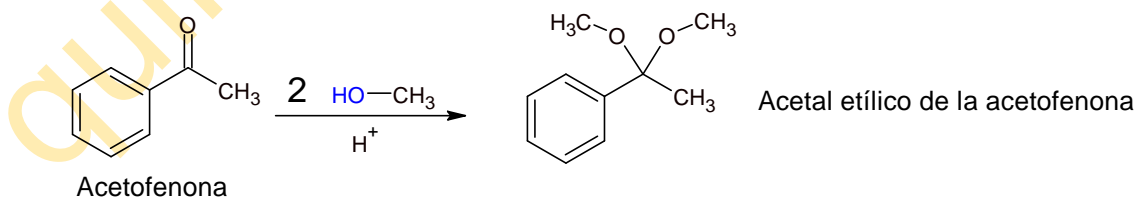
Mecanismo





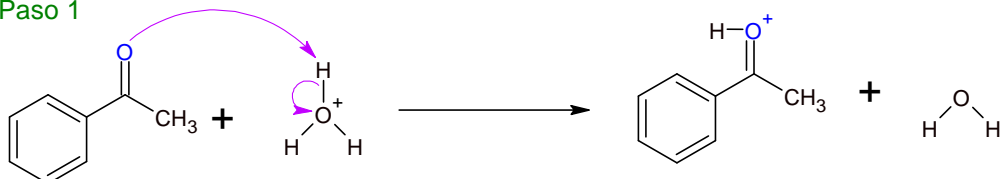
4. Formación de Acetales*

Formación de Acetales

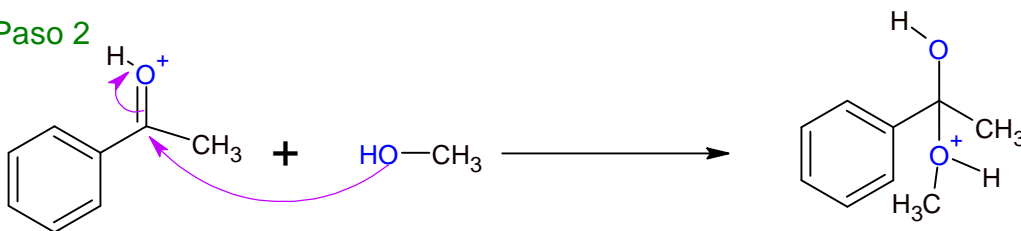


Mecanismo

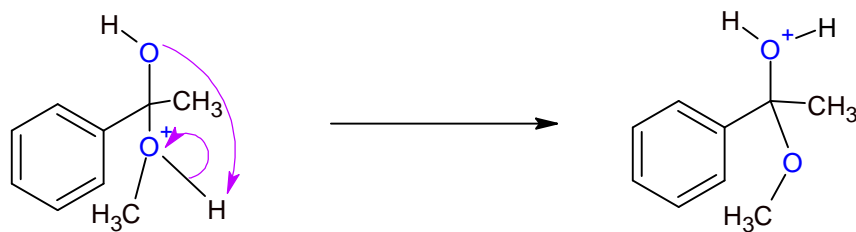
Paso 1



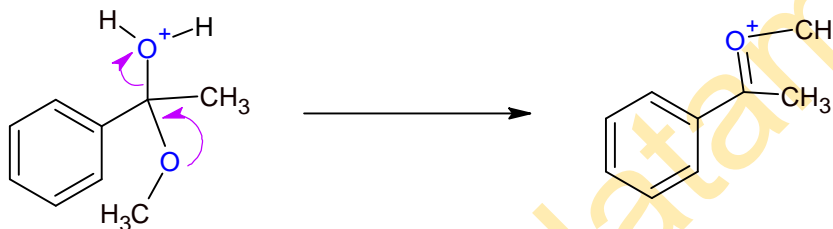
Paso 2



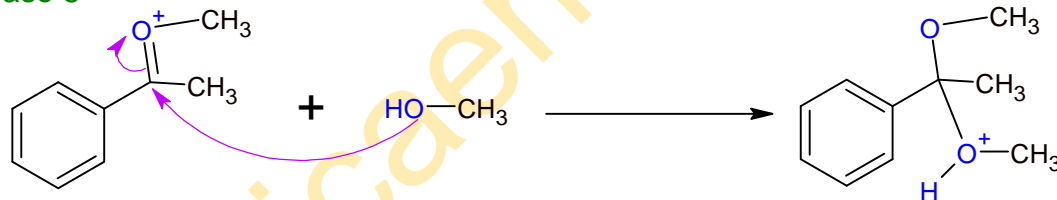
Paso 3



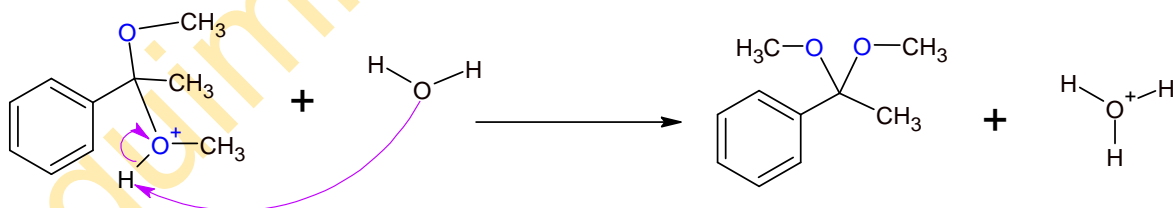
Paso 4



Paso 5



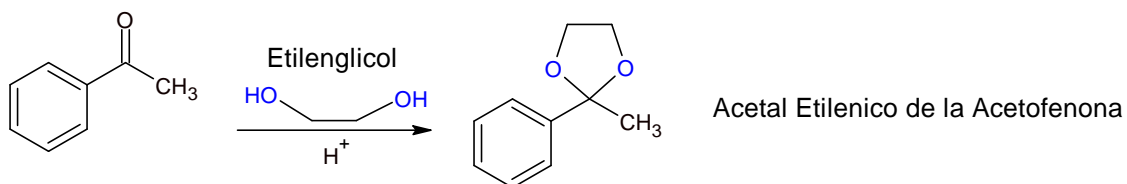
Paso 6



Acetal Etílico de la acetofenona

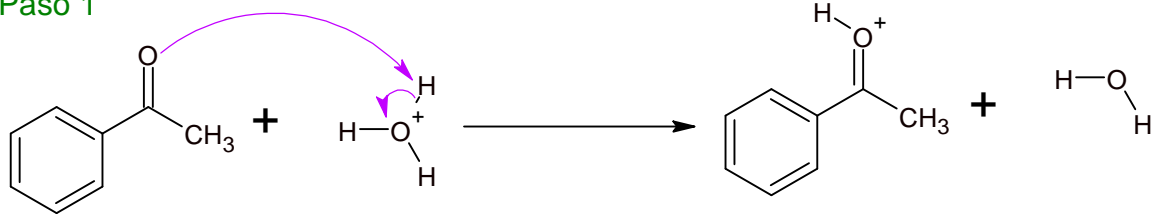
5. Formación de Acetales Cíclicos*

Protección del Grupo Carbonilo

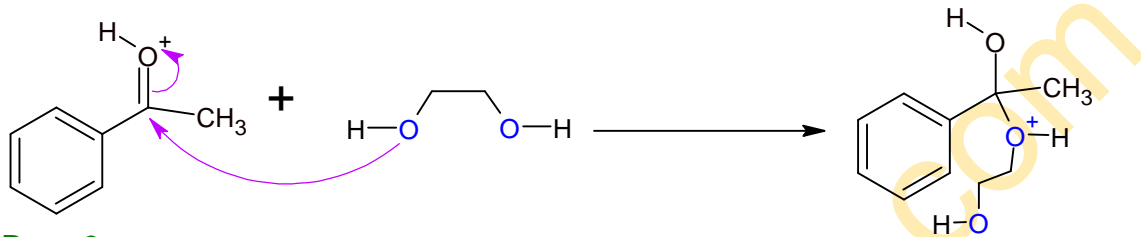


Mecanismo

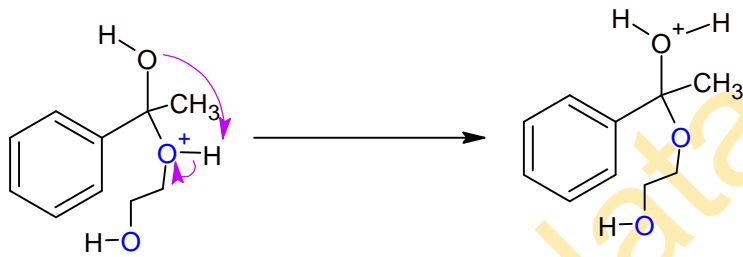
Paso 1



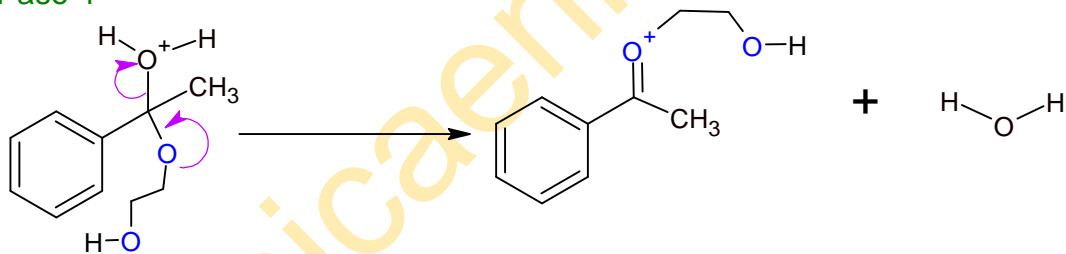
Paso 2



Paso 3



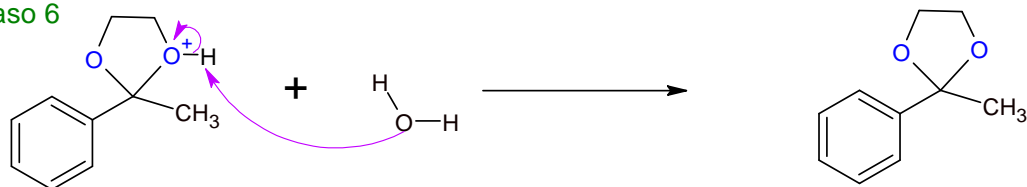
Paso 4



Paso 5



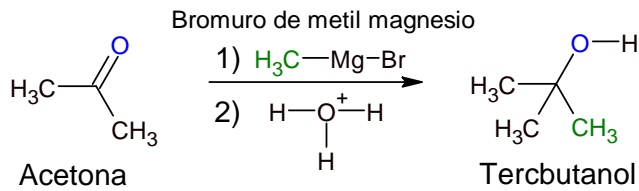
Paso 6



Acetal Etilenico de la Acetofenona

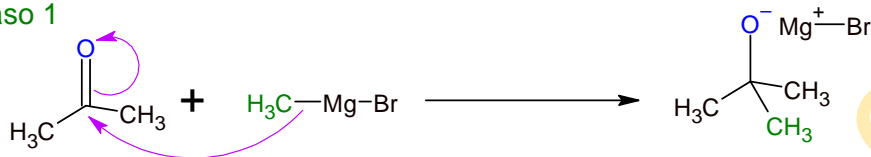
6. Formación de Alcoholes (Grignard)

Síntesis de Alcoholes vía Grignard

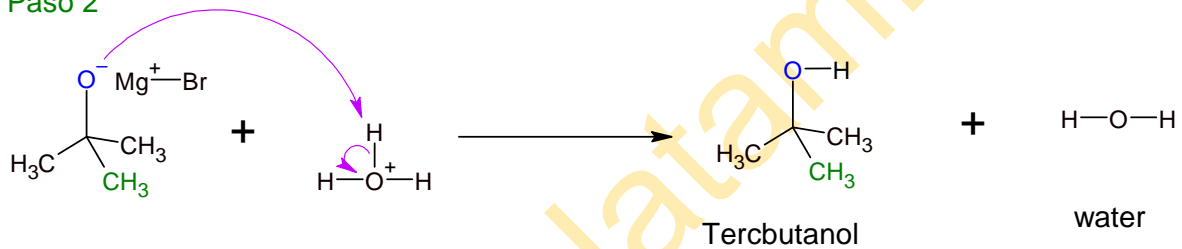


Mecanismo

Paso 1

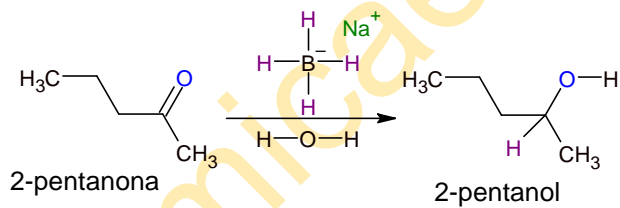


Paso 2



7. Reducción con NaBH₄

Reducción

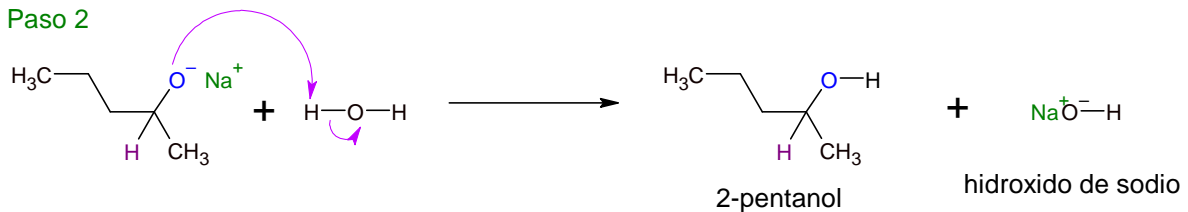


Mecanismo

Paso 1

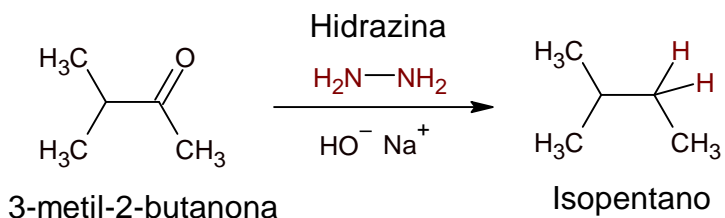


Paso 2



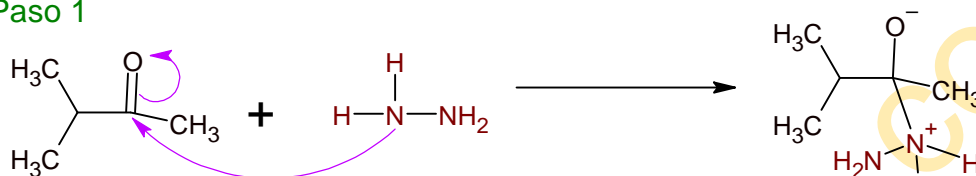
8. Reducción de Wolf-Kishner

Reducción

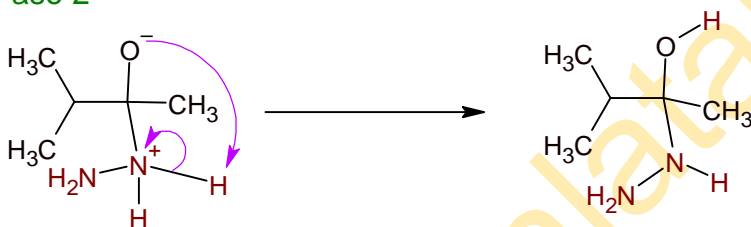


Mecanismo

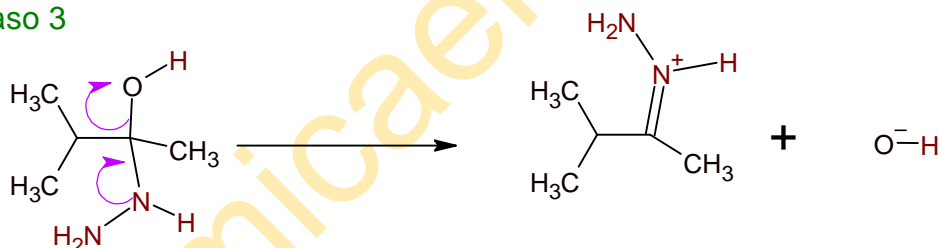
Paso 1



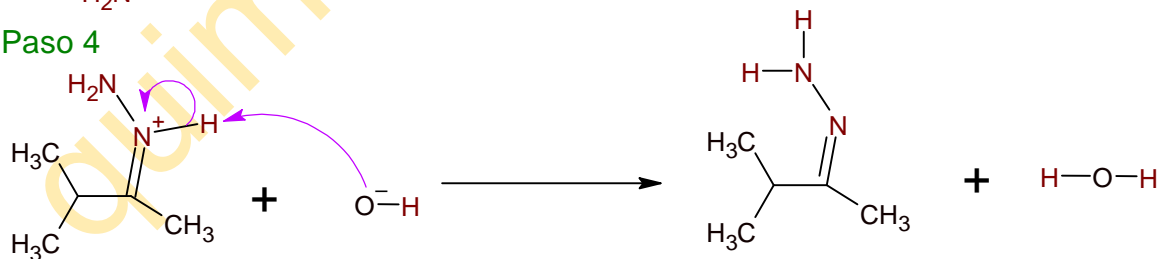
Paso 2



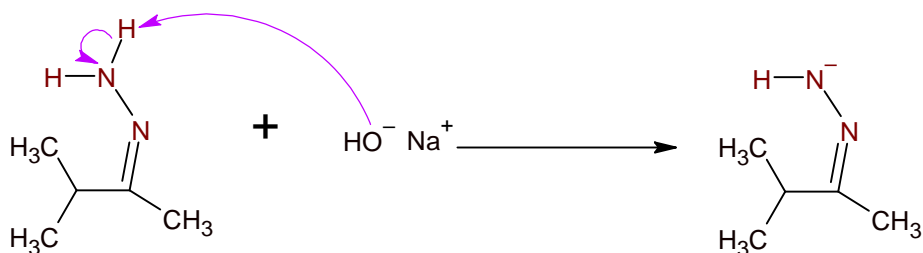
Paso 3



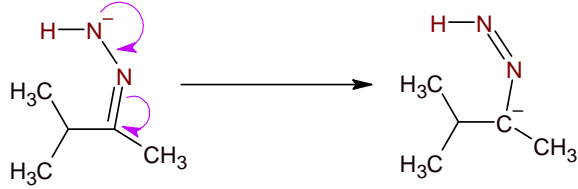
Paso 4



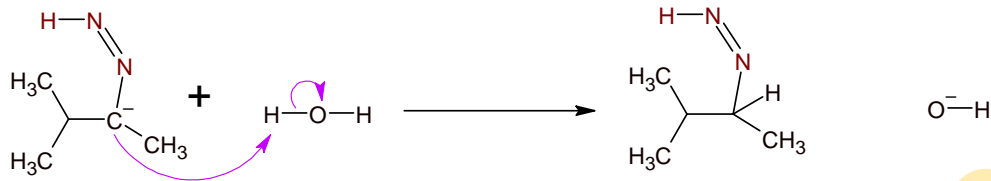
Paso 5



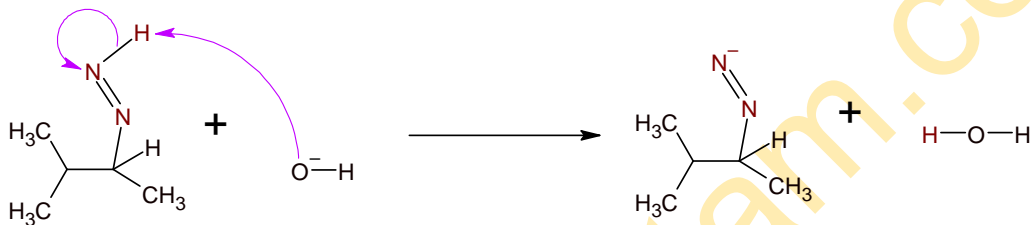
Paso 6



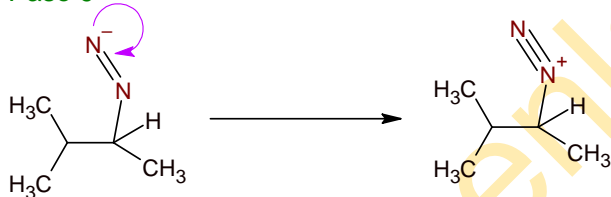
Paso 7



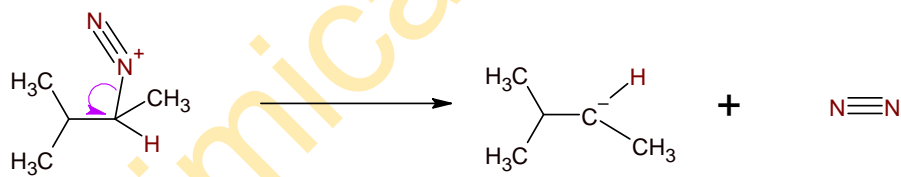
Paso 8



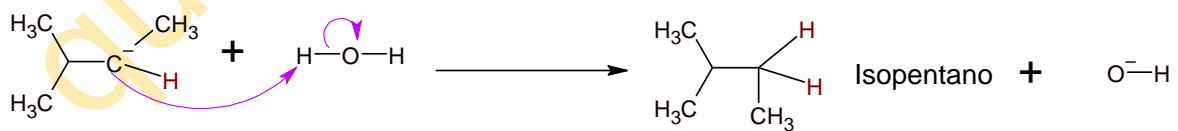
Paso 9



Paso 10

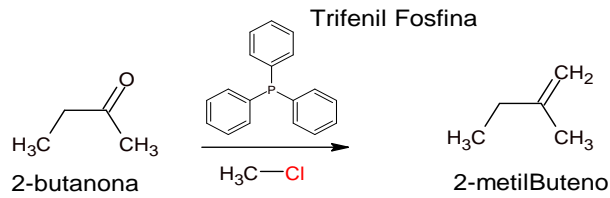


Paso 11



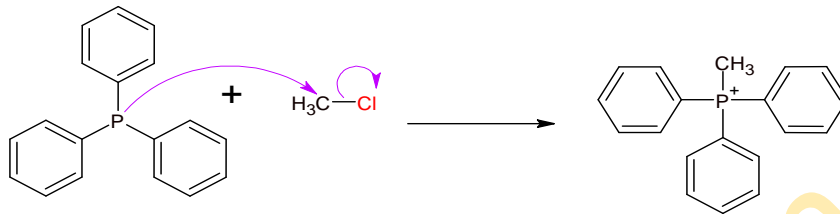
9. Reacción de Wittig

Reacción de Wittig - Premio Nobel 1979

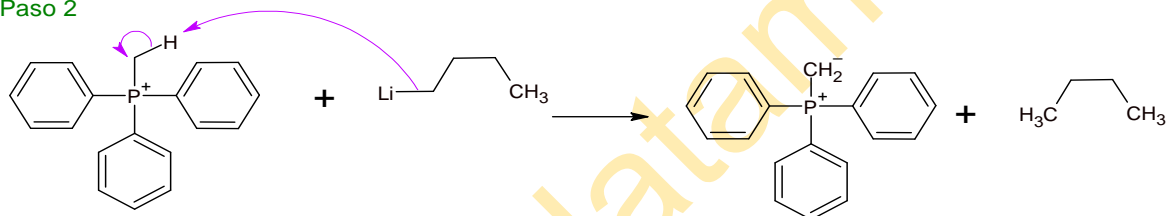


Mecanismo

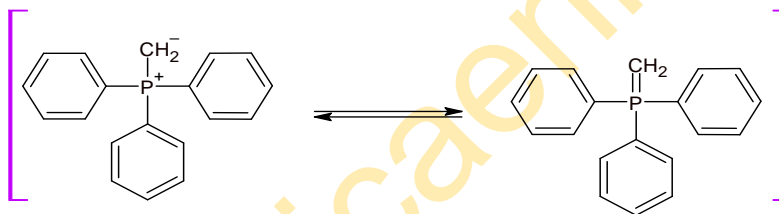
Paso 1



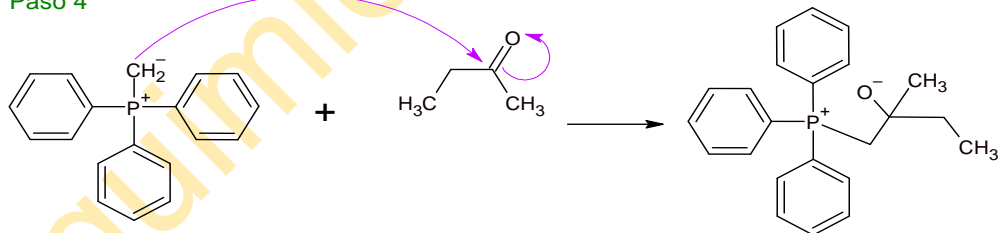
Paso 2



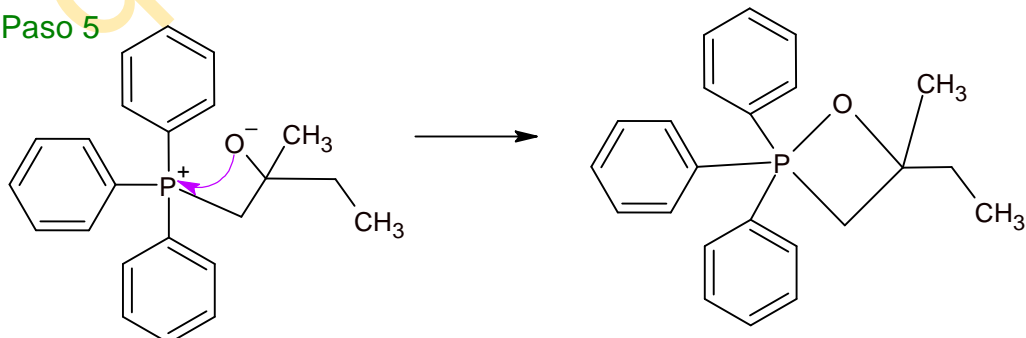
Paso 3



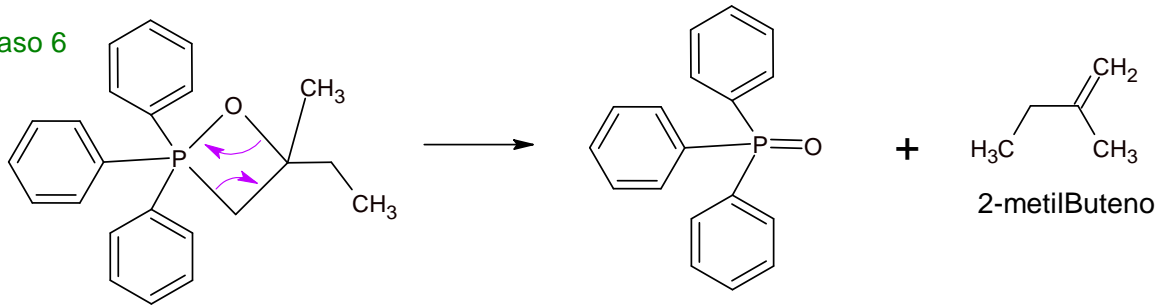
Paso 4



Paso 5

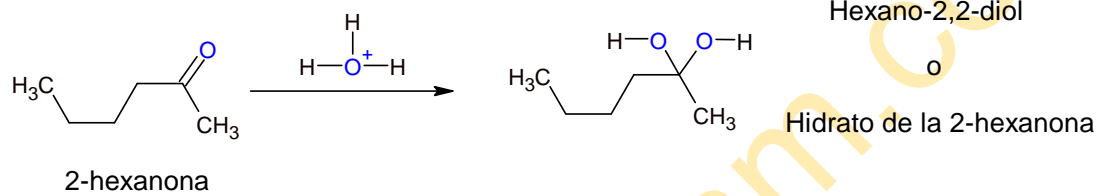


Paso 6



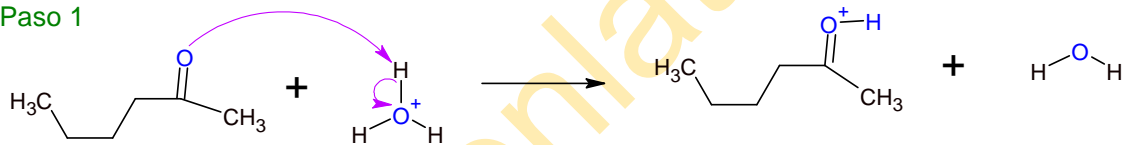
10. Hidratación*

Hidratación del Grupo Carbonilo

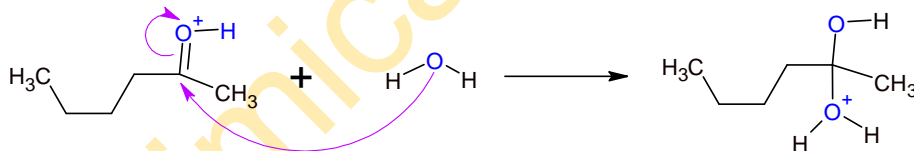


Mecanismo

Paso 1



Paso 2



Paso 3

