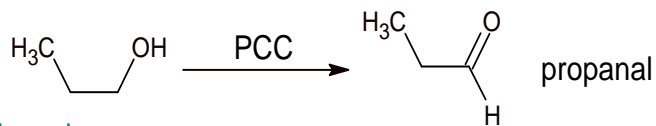


# Apoyo 2do Departamental | ESIQIE 21/1 |

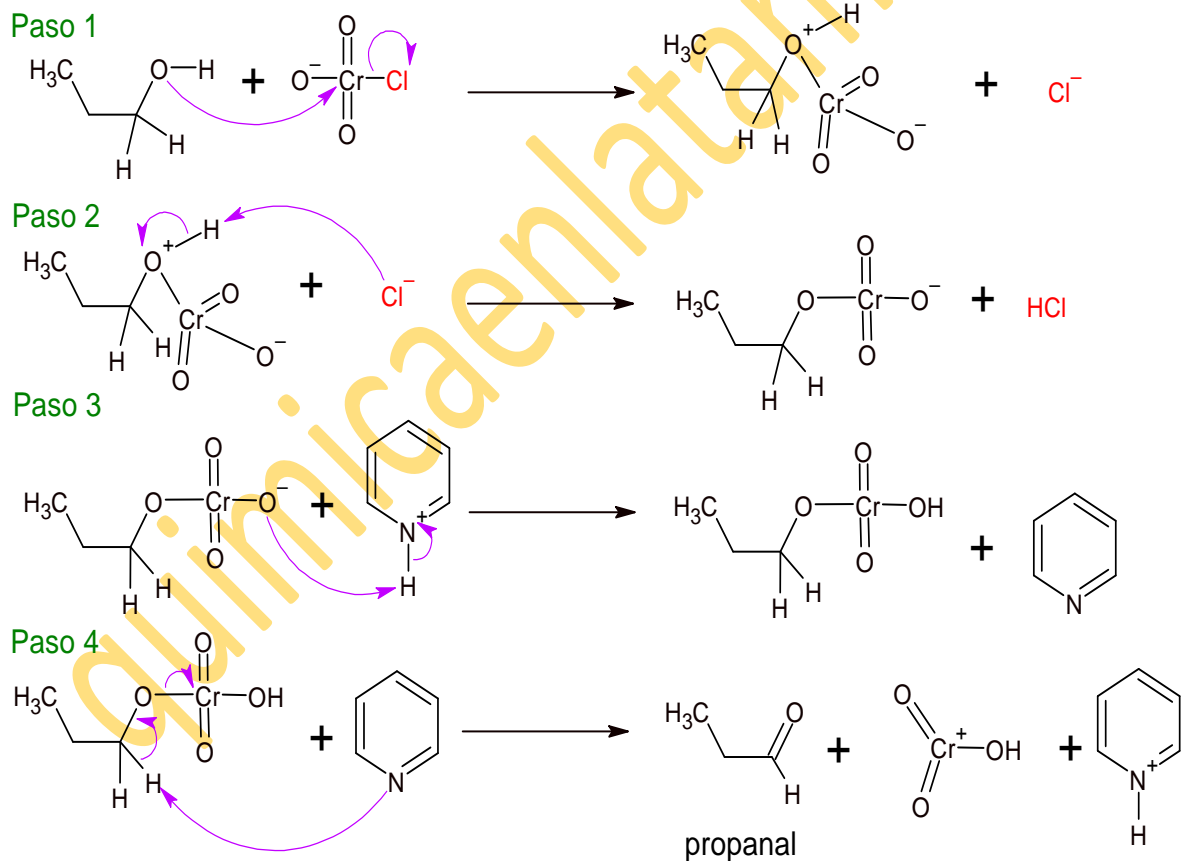
## 👉 Síntesis de Aldehídos | Mecanismos

### 1. Oxidación con PCC

#### Oxidación de Alcoholes

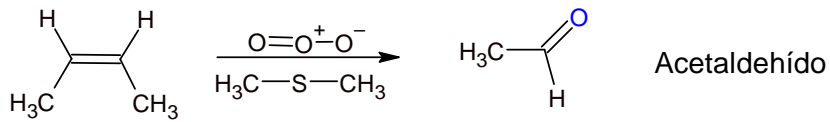


#### Mecanismo

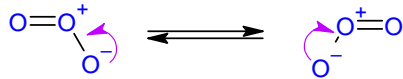


## 2. Ozonólisis de Alquenos

### Ruptura en Condiciones Reductivas de un Alqueno

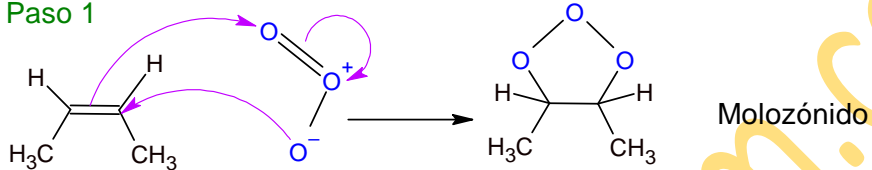


### Estructuras de resonancia del OZONO

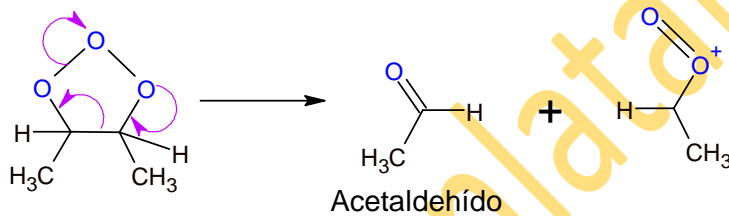


### Mecanismo

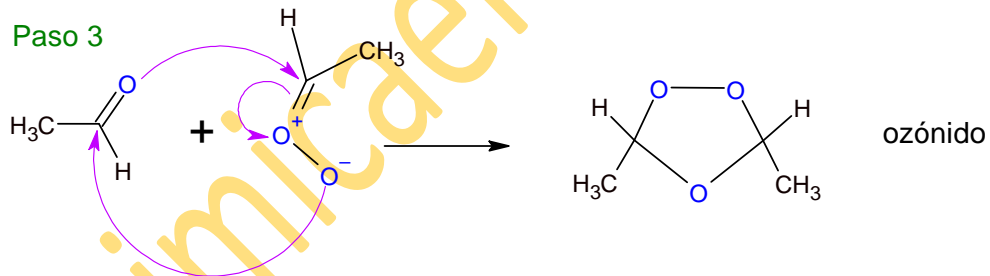
#### Paso 1



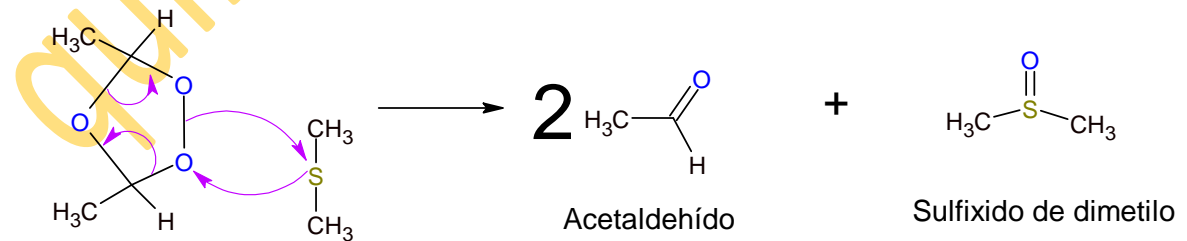
#### Paso 2



#### Paso 3

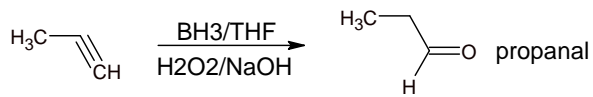


#### Paso 4



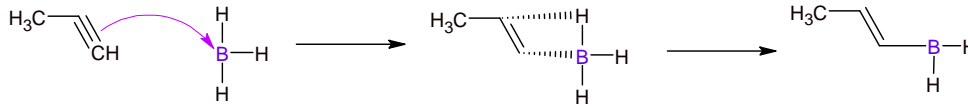
### 3. Hidroboración – Oxidación

Hidroboración - Oxidación

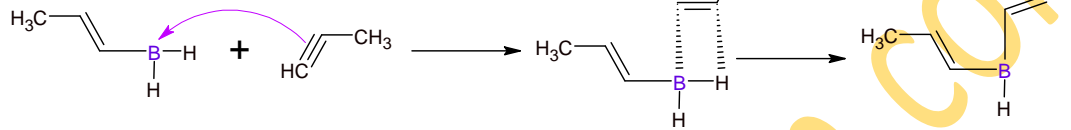


Mecanismo

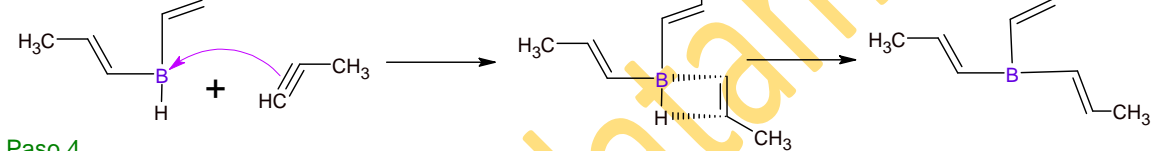
Paso 1



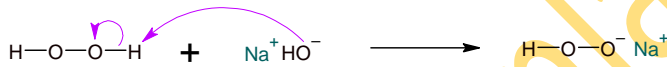
Paso 2



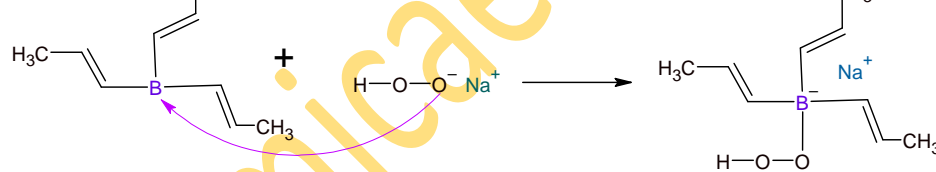
Paso 3



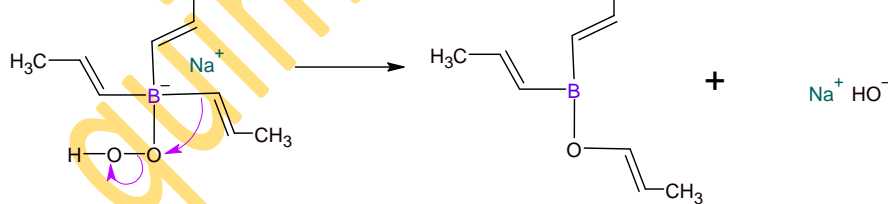
Paso 4



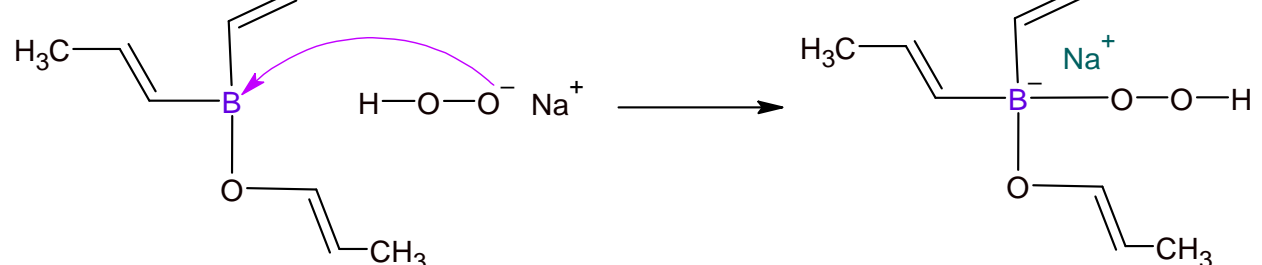
Paso 5

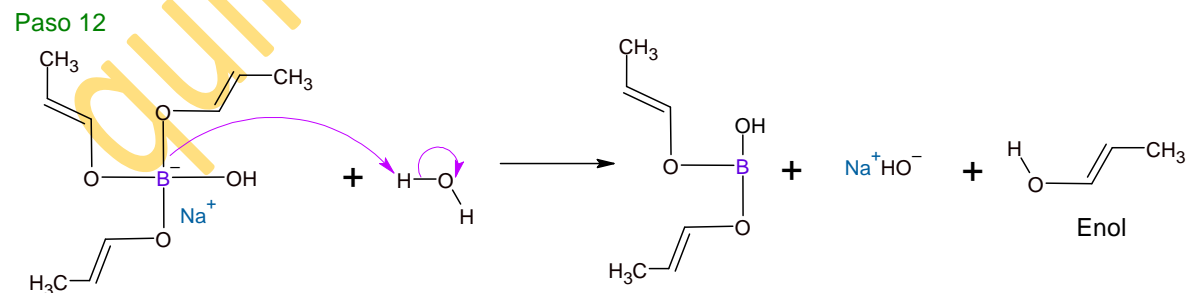
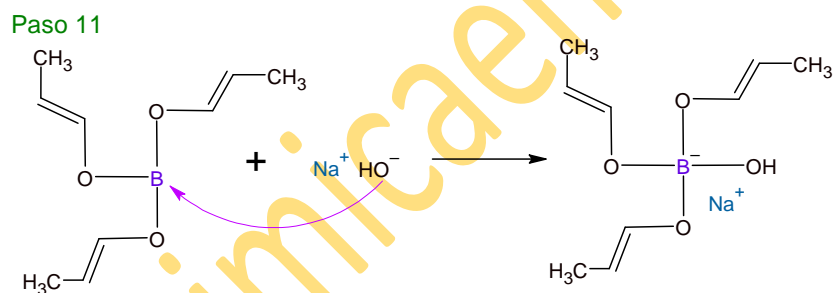
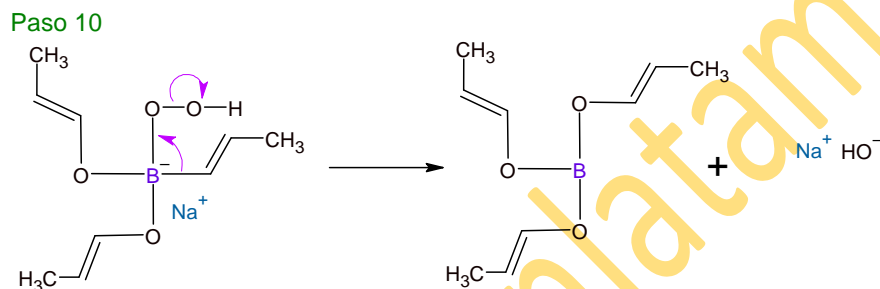
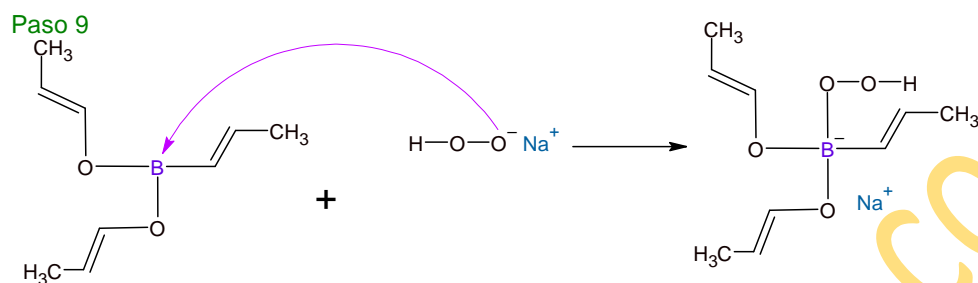
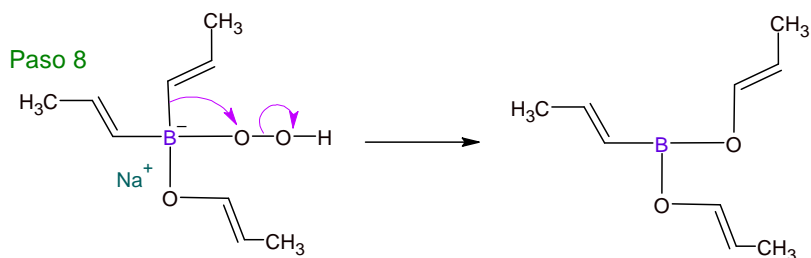


Paso 6

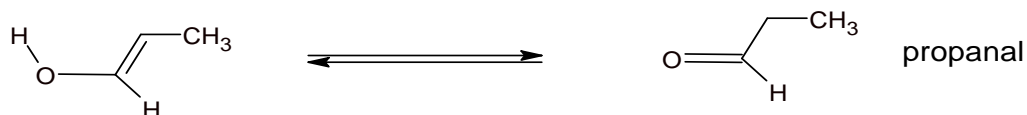


Paso 7



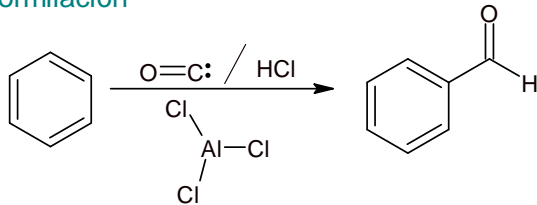


**Paso 13 | Tautomerización**



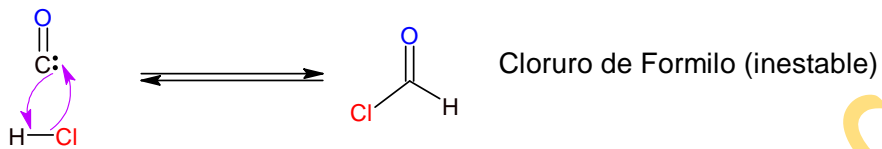
## 4. Acilación de Gatterman – Koch

### Formilación

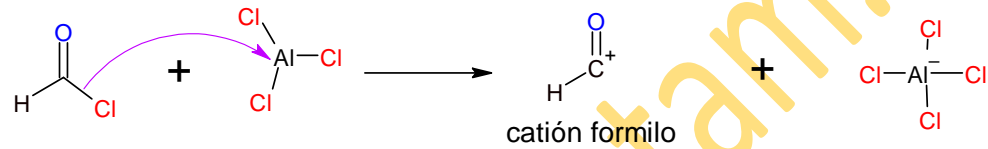


### Mecanismo

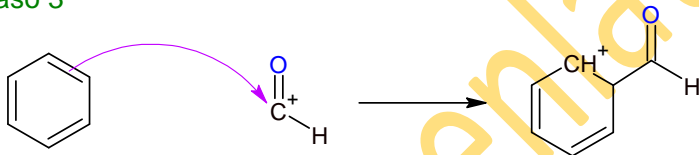
#### Paso 1



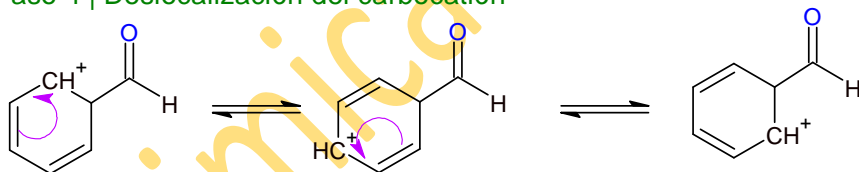
#### Paso 2



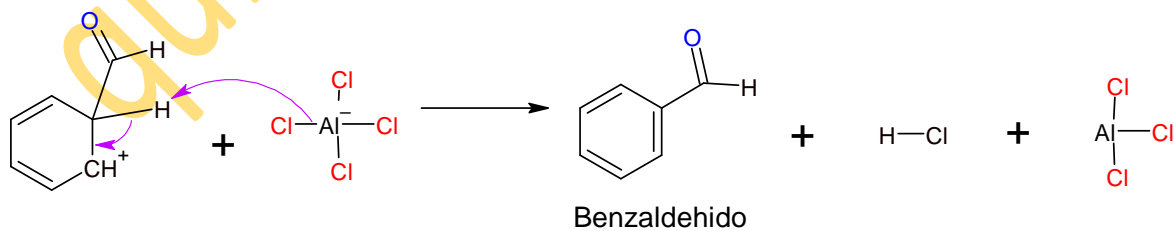
#### Paso 3



#### Paso 4 | Deslocalización del carbocatión

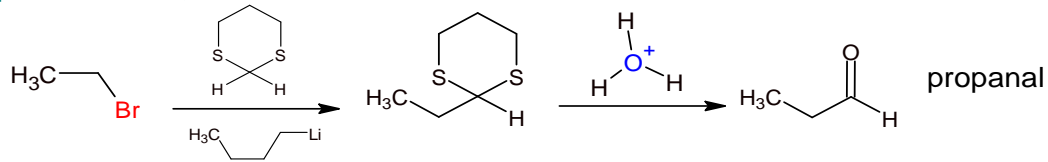


#### Paso 5 | Reconstrucción del Anillo



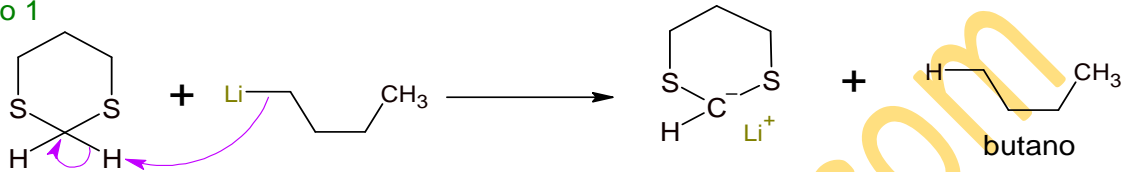
## 5. Síntesis de Aldeídos a partir del 1,3 – Ditiano

### Alquilación del 1,3 Ditiano

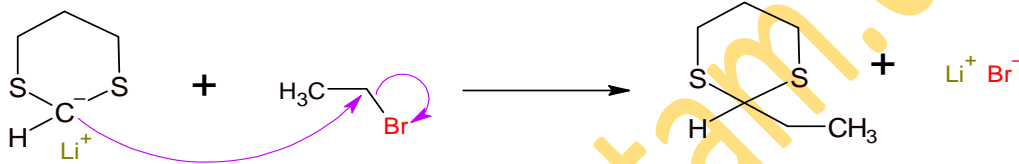


### Mecanismo

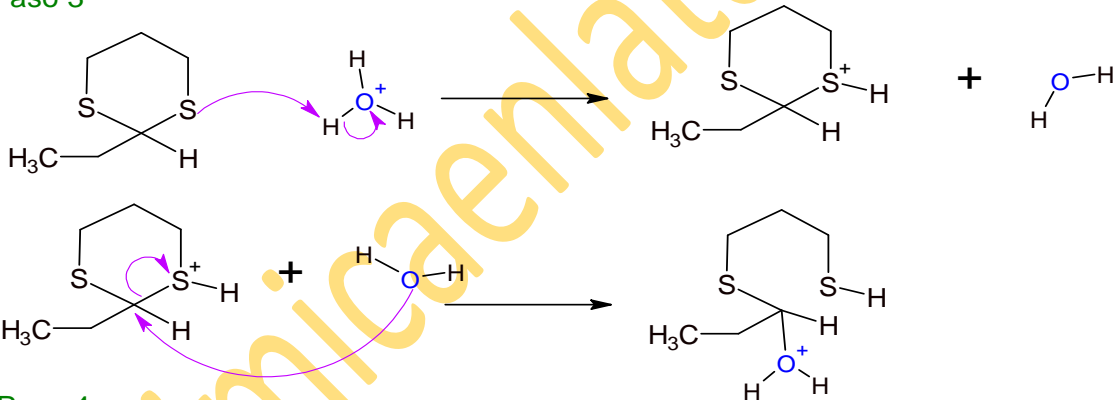
#### Paso 1



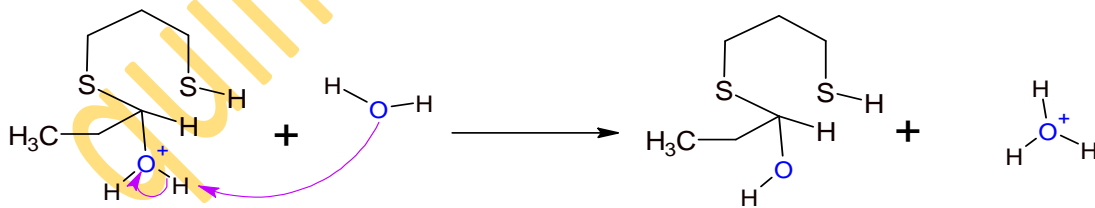
#### Paso 2



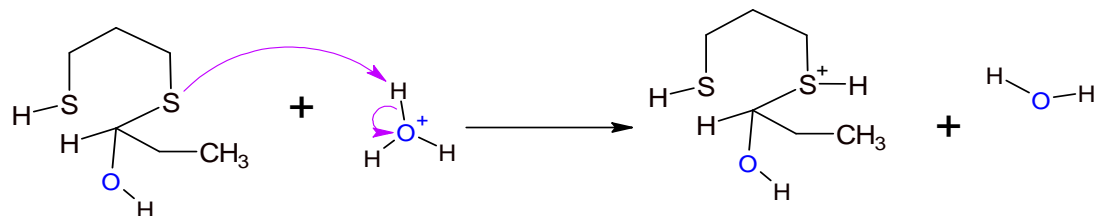
#### Paso 3



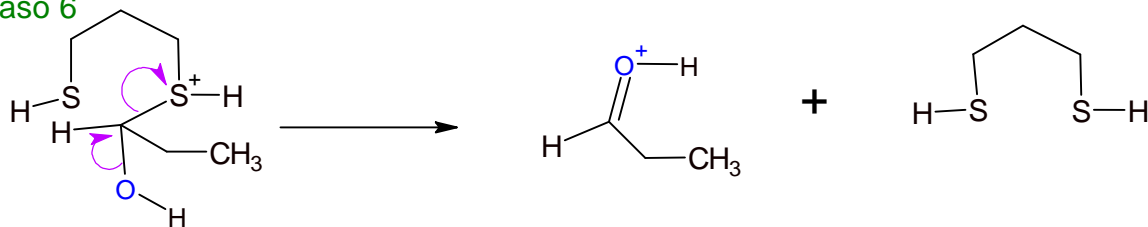
#### Paso 4



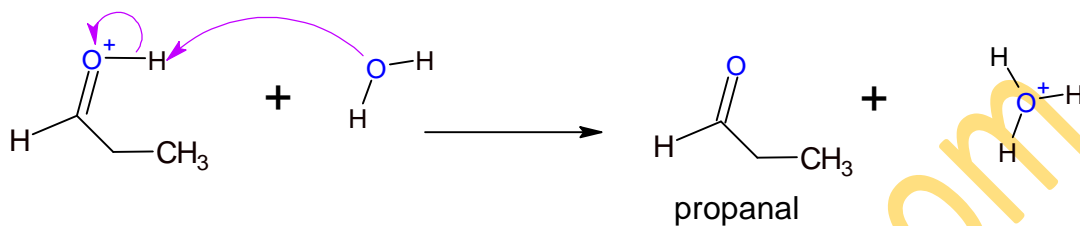
#### Paso 5



Paso 6

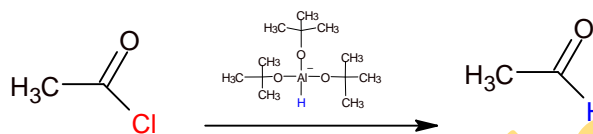


Paso 7



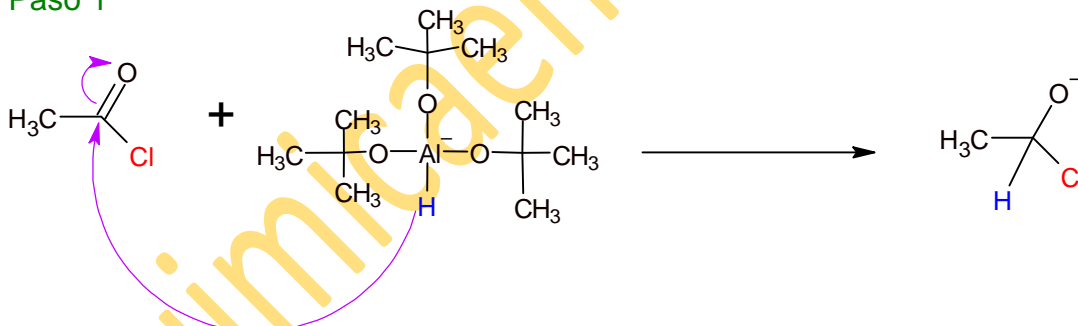
## 6. Reducción de Cloruros de Ácido

Reducciones de Cloruros de Ácido

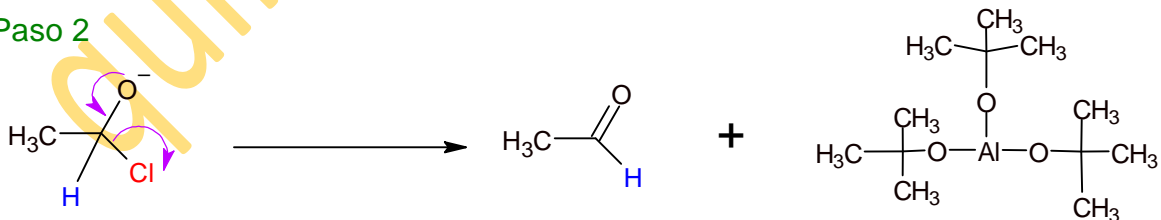


Mecanismo

Paso 1

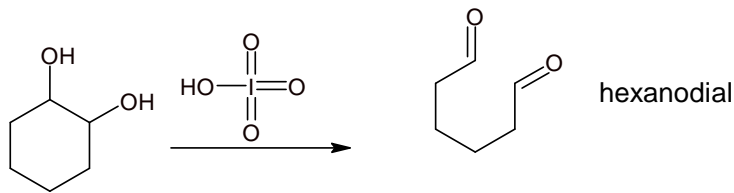


Paso 2



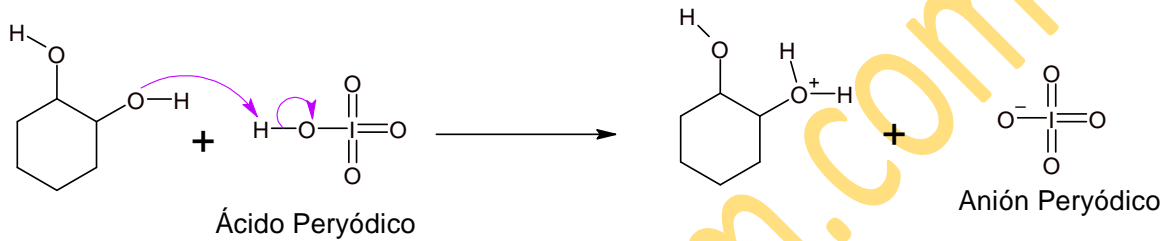
## 7. Ruptura de Dioles mediante el $HIO_4$

Ruptura de glicoles por Ácido Peryódico

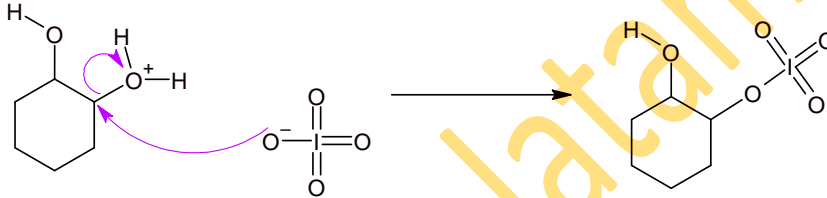


Mecanismo

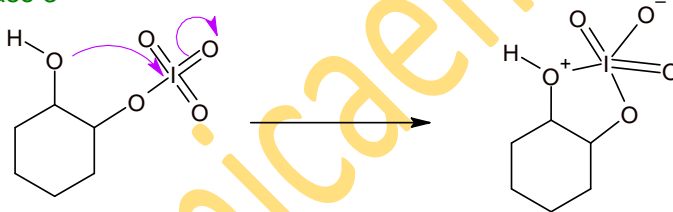
Paso 1



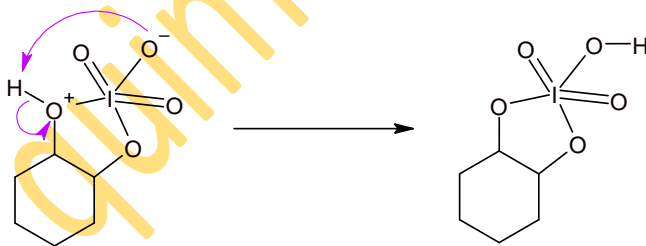
Paso 2



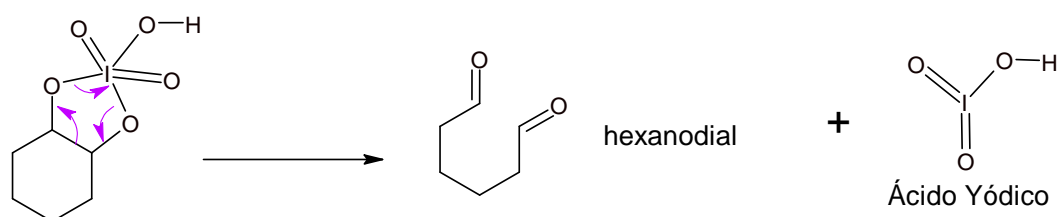
Paso 3



Paso 4



Paso 5

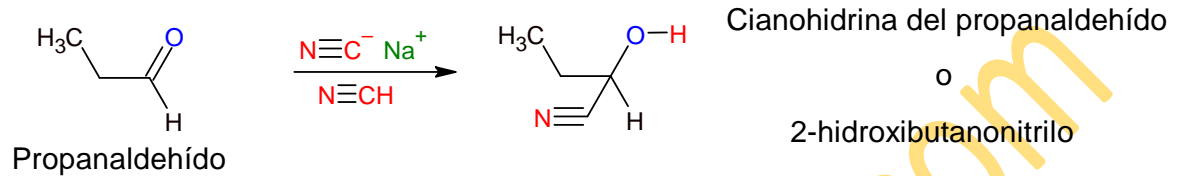




# Reacciones de los Aldehídos | Mecanismos

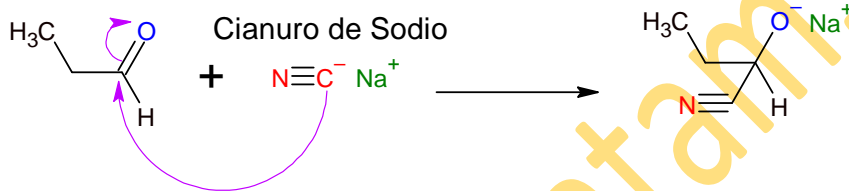
## 1. Formación de Cianohidrinas

### Formación de Cianohidrinas

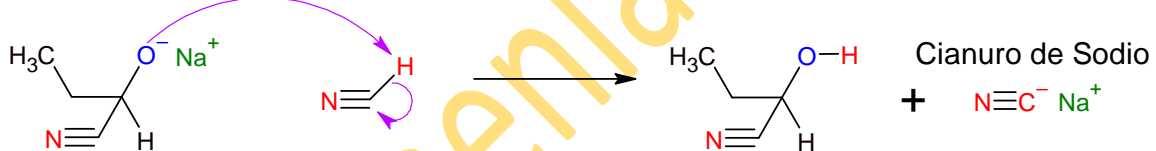


### Mecanismo

#### Paso 1

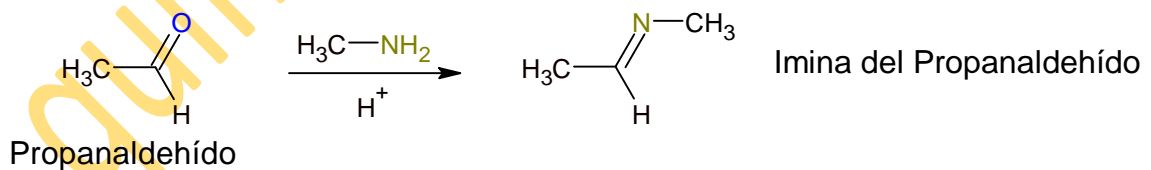


#### Paso 2



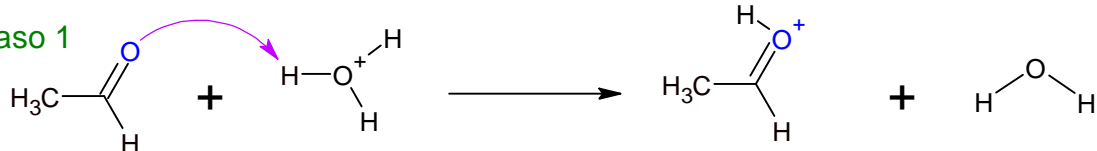
## 2. Formación de Iminas\*

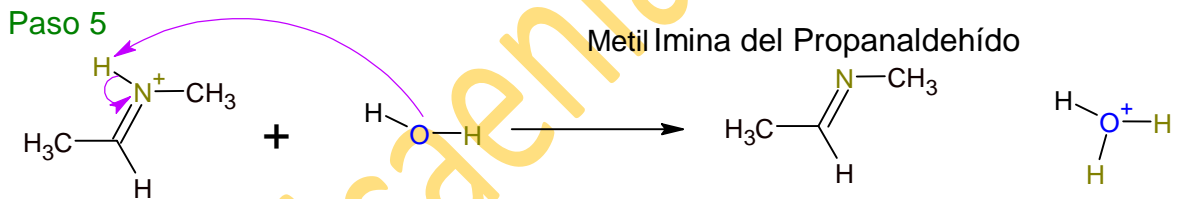
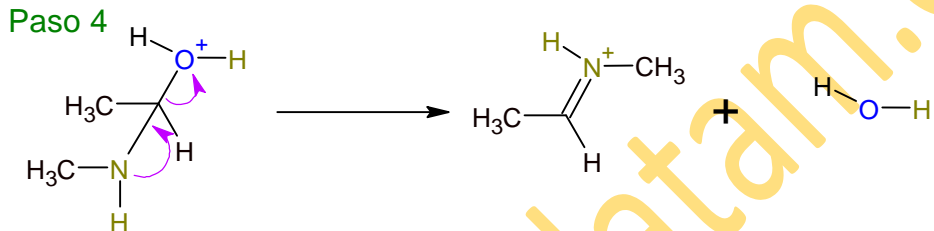
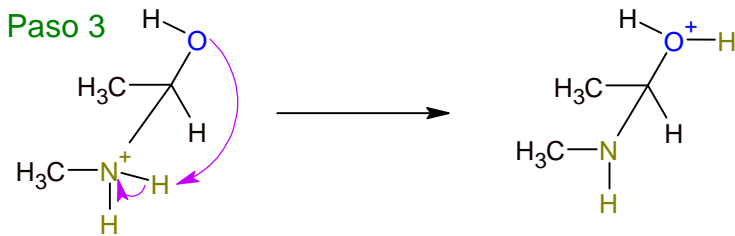
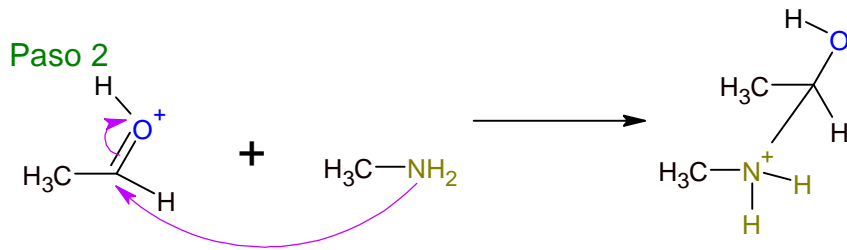
### Formación de Cianohidrinas



### Mecanismo

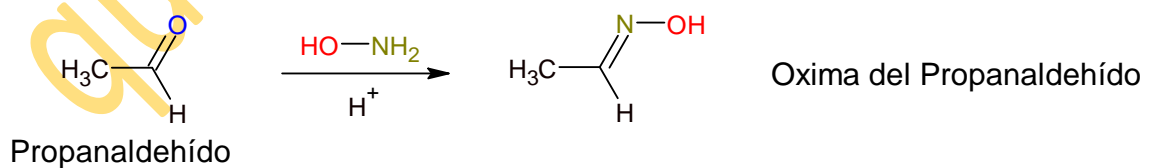
#### Paso 1



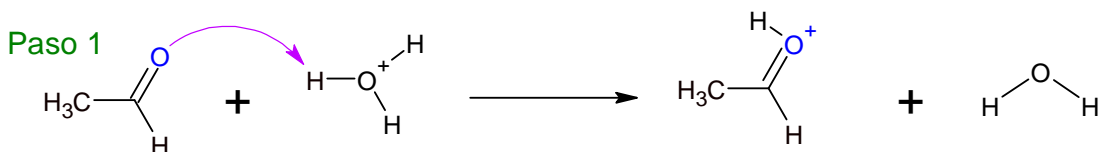


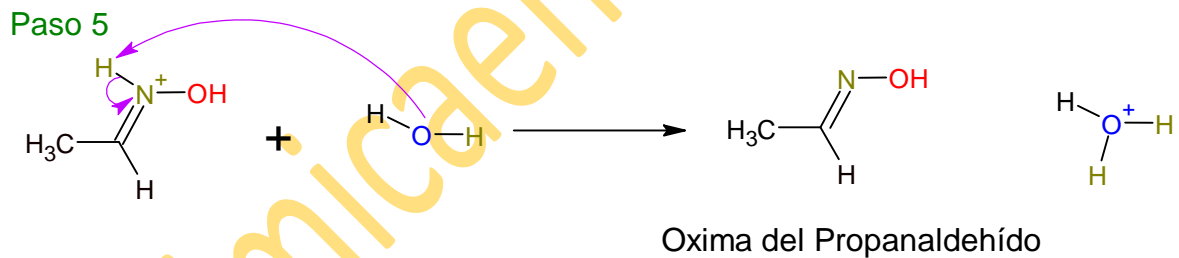
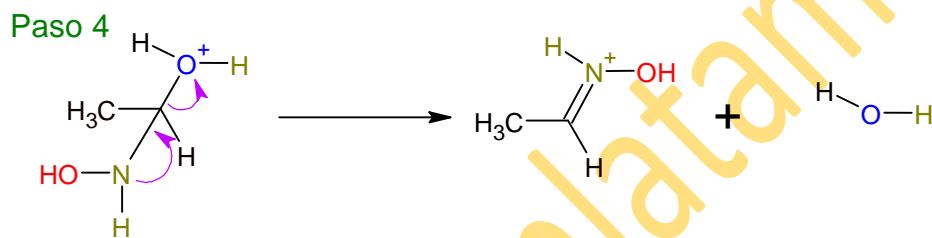
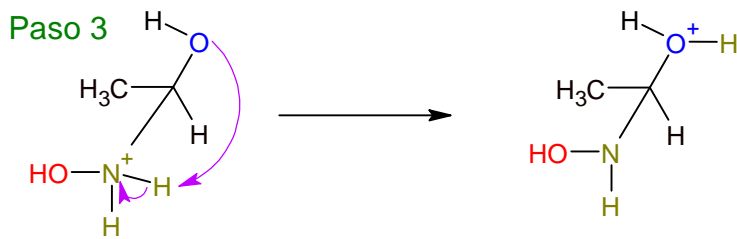
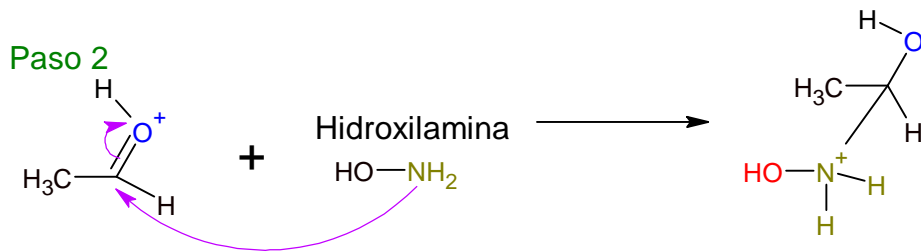
### 3. Formación de Oximas

#### Formación de Oximas



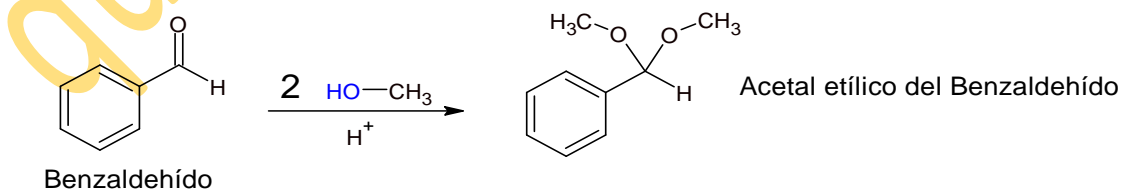
#### Mecanismo





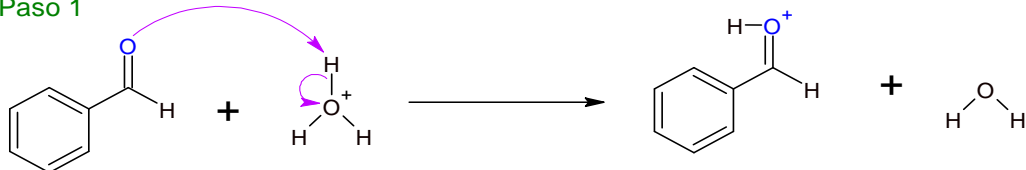
## 4. Formación de Acetales\*

Formación de Acetales

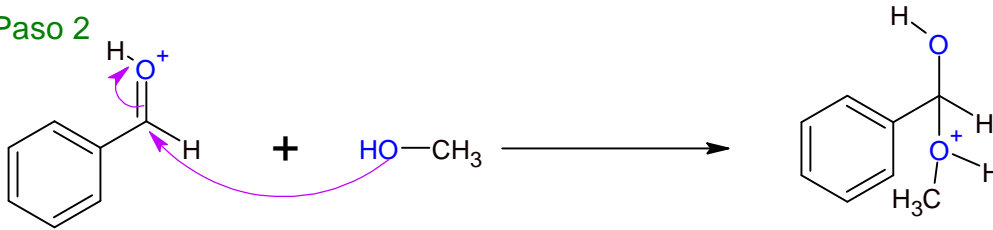


Mecanismo

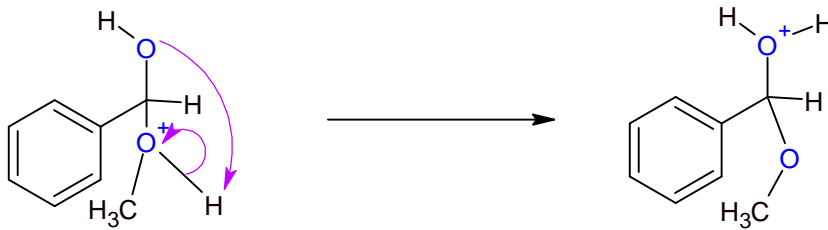
Paso 1



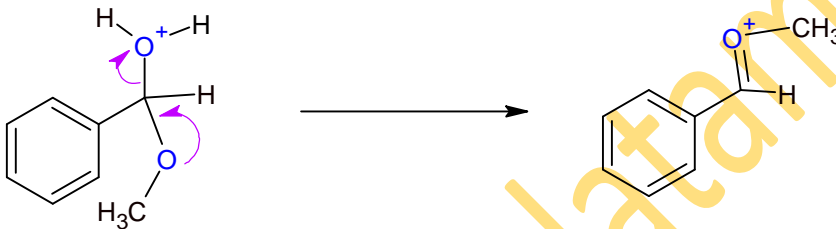
Paso 2



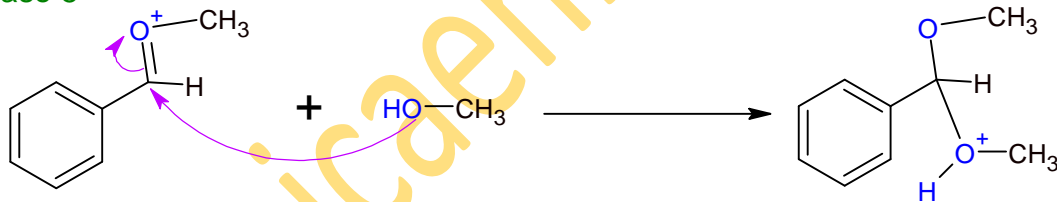
Paso 3



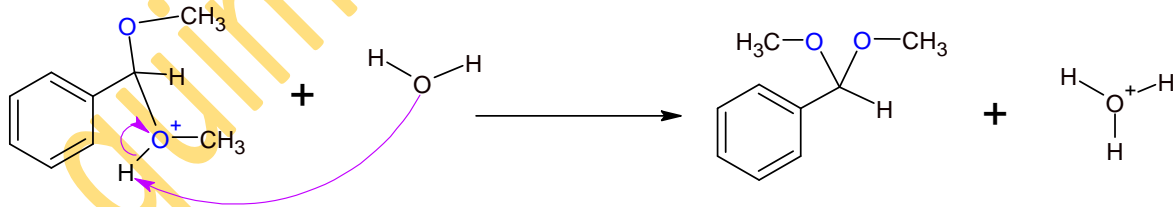
Paso 4



Paso 5



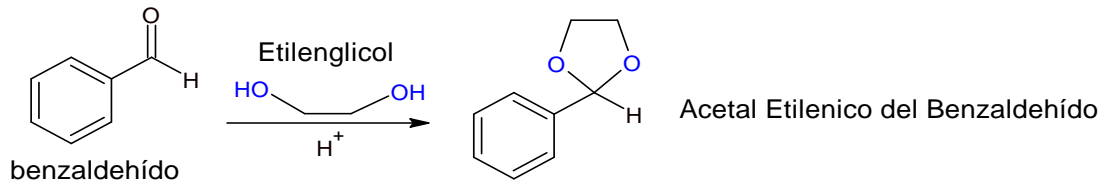
Paso 6



Acetal Etilico del Benzaldehído

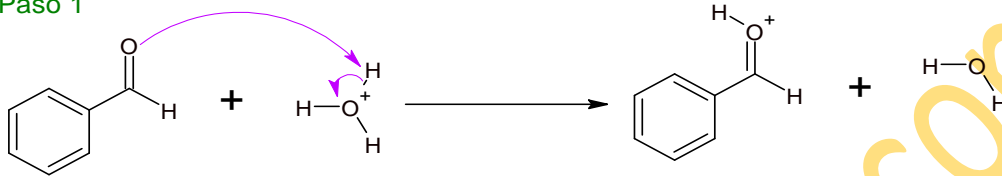
## 5. Formación de Acetales Cíclicos\*

Protección del Grupo Carbonilo

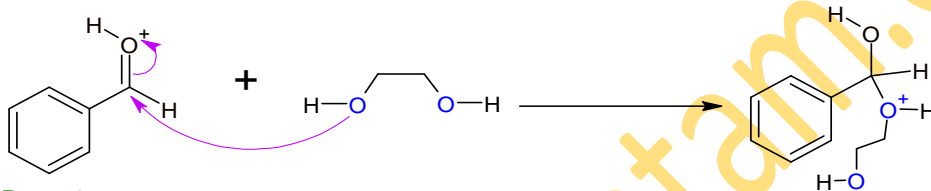


Mecanismo

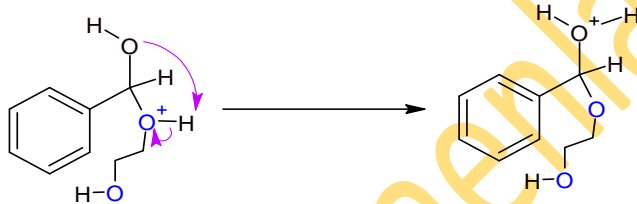
Paso 1



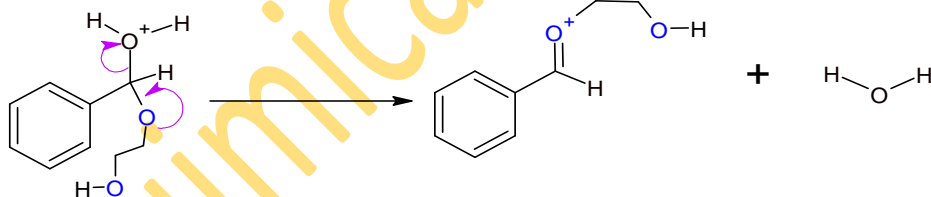
Paso 2



Paso 3



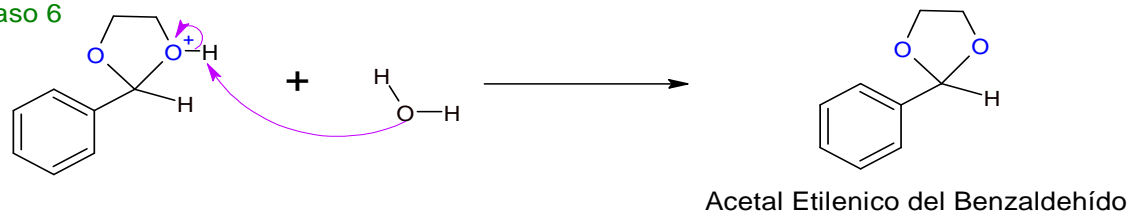
Paso 4



Paso 5

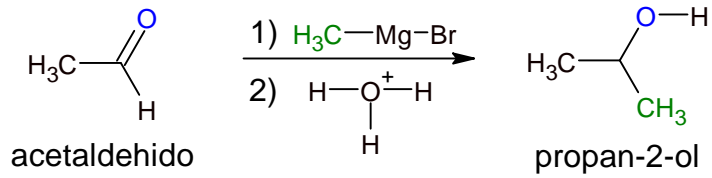


Paso 6



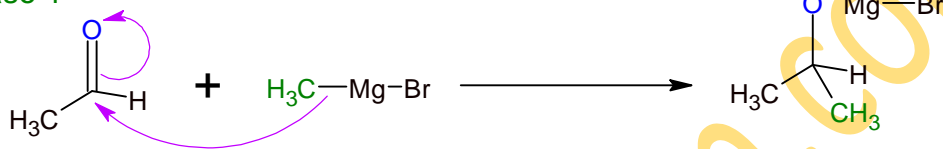
## 6. Formación de Alcoholes (Gignard)

### Síntesis de Alcoholes vía Grignard



### Mecanismo

#### Paso 1

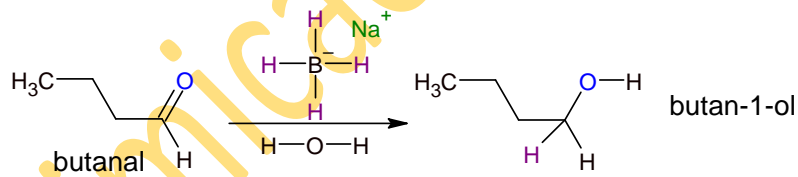


#### Paso 2



## 7. Reducción con NaBH4

### Reducción

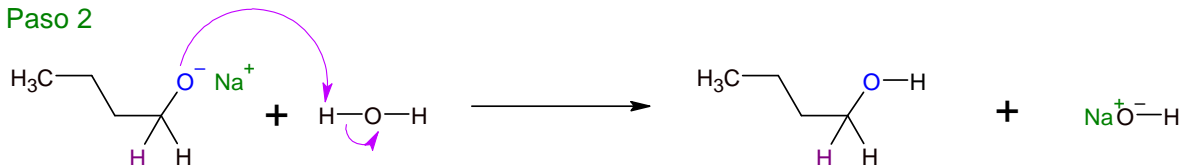


### Mecanismo

#### Paso 1

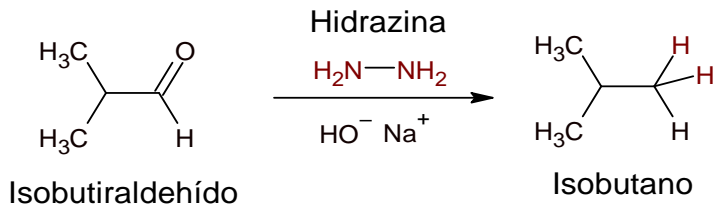


#### Paso 2



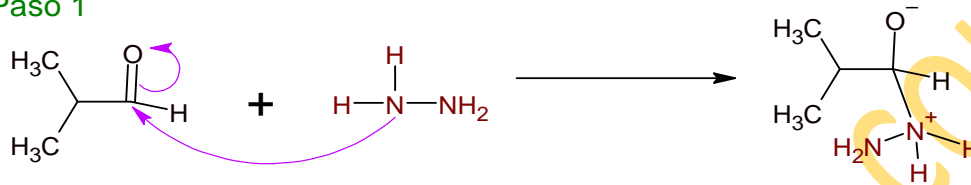
## 8. Reducción de Wolf-Kishner

### Reducción

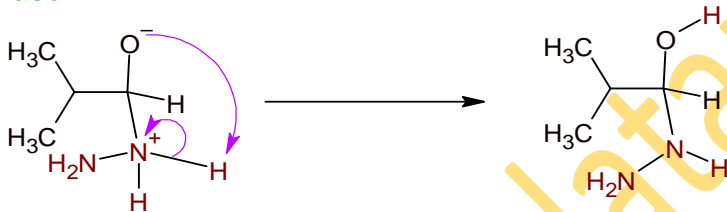


### Mecanismo

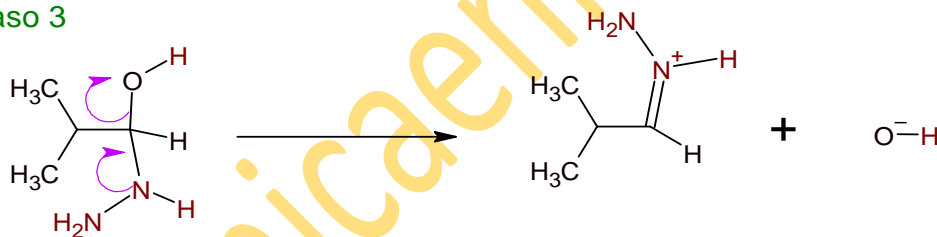
#### Paso 1



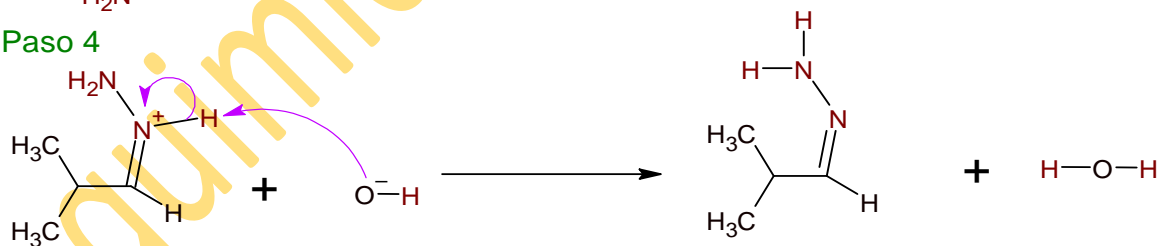
#### Paso 2



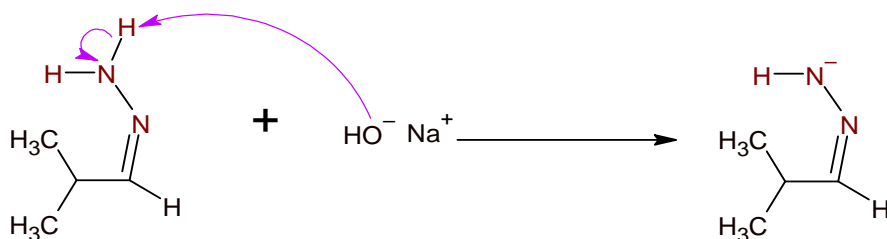
#### Paso 3



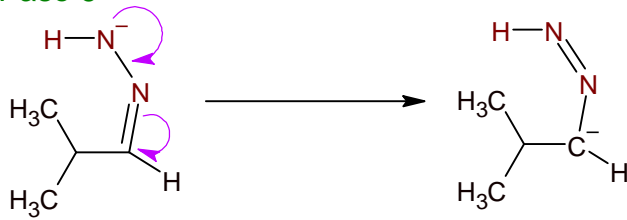
#### Paso 4



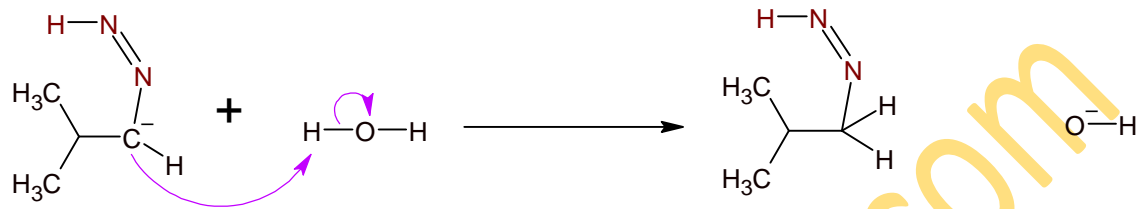
#### Paso 5



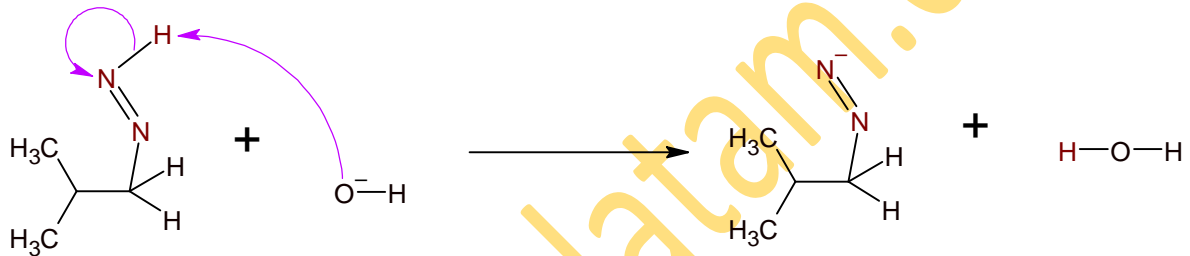
**Paso 6**



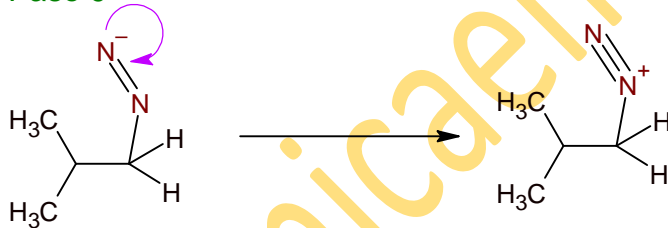
**Paso 7**



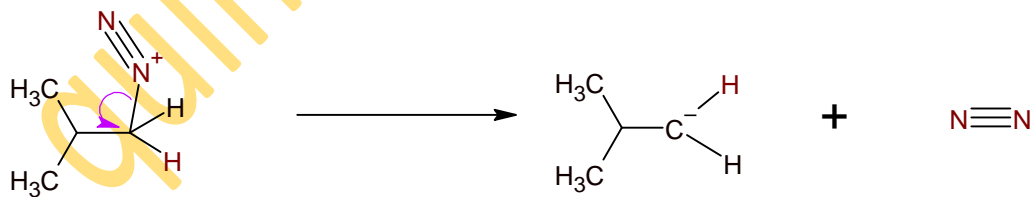
**Paso 8**



**Paso 9**



**Paso 10**



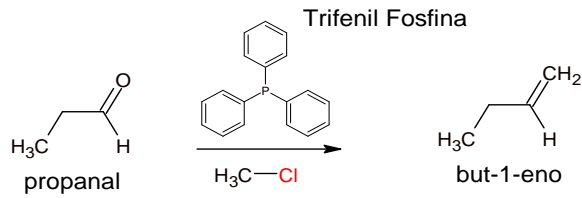
**Paso 11**





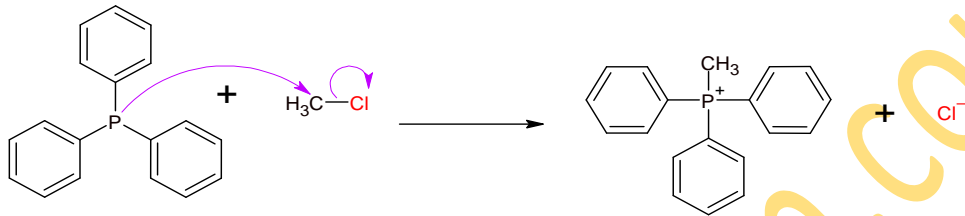
## 9. Reacción de Wittig

Reacción de Wittig - Premio Nobel 1979

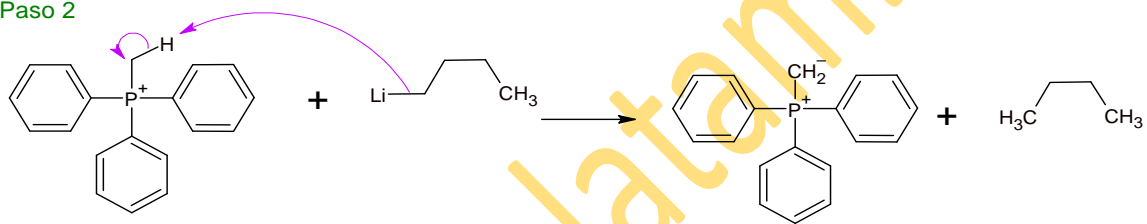


Mecanismo

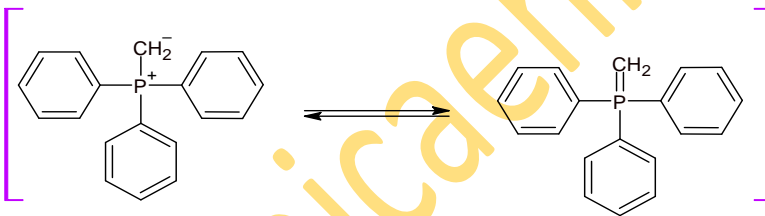
Paso 1



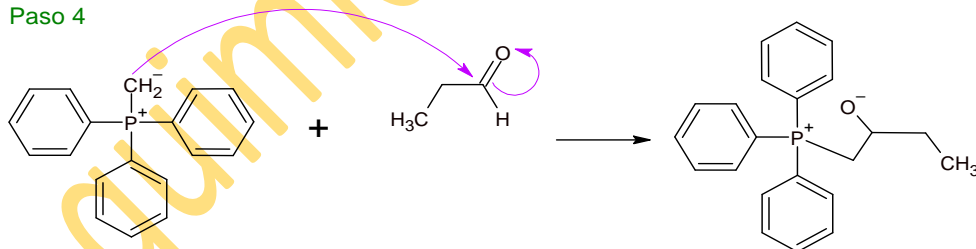
Paso 2



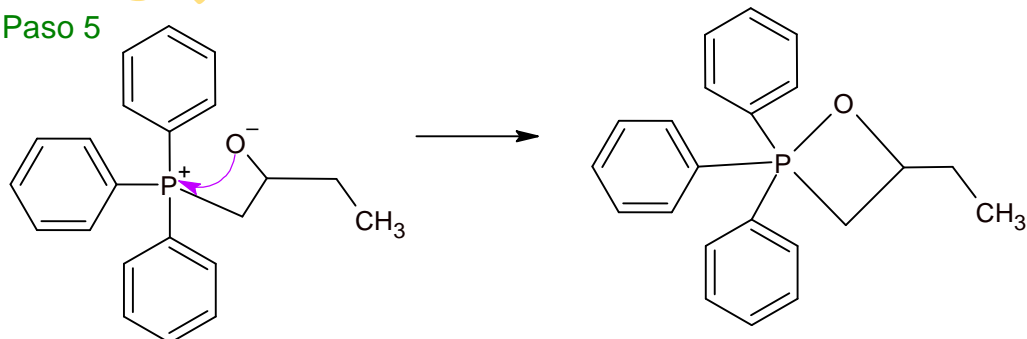
Paso 3



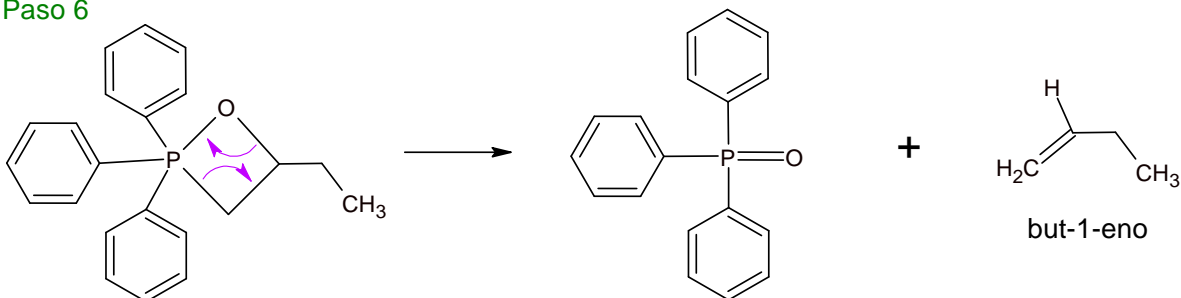
Paso 4



Paso 5

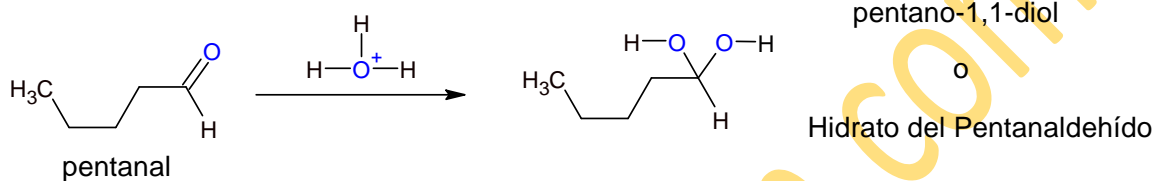


Paso 6



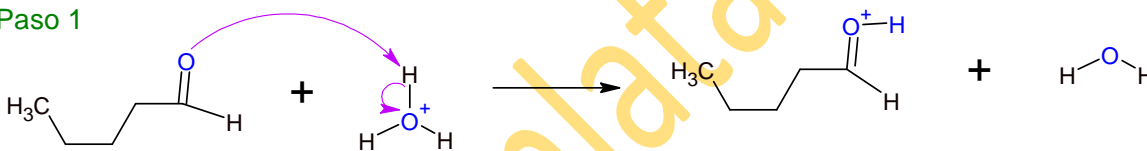
## 10. Hidratación\*

Hidratación del Grupo Carbonilo

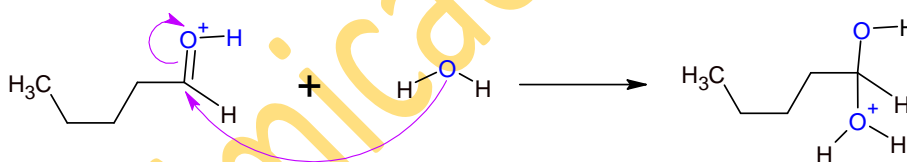


Mecanismo

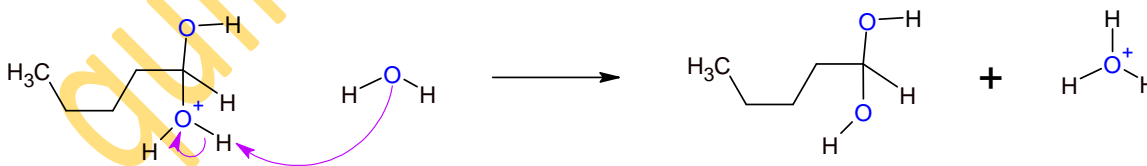
Paso 1



Paso 2

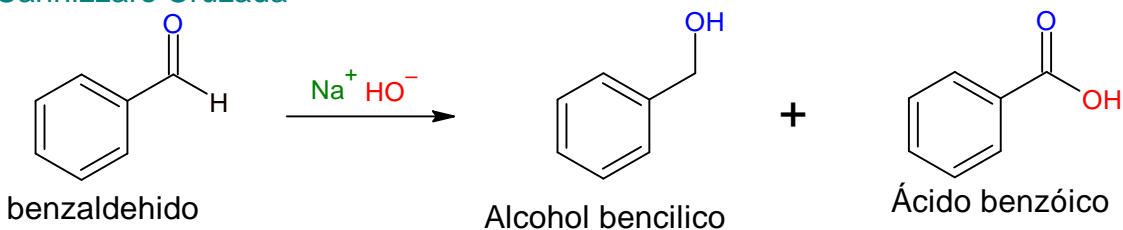


Paso 3



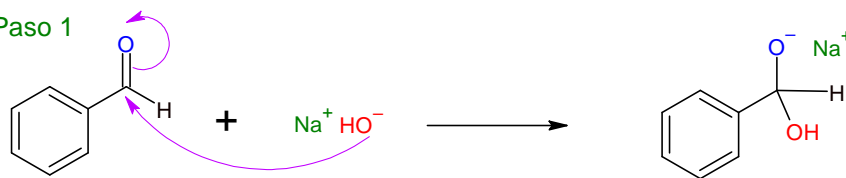
## 11. Cannizzaro Cruzada

Cannizzaro Cruzada

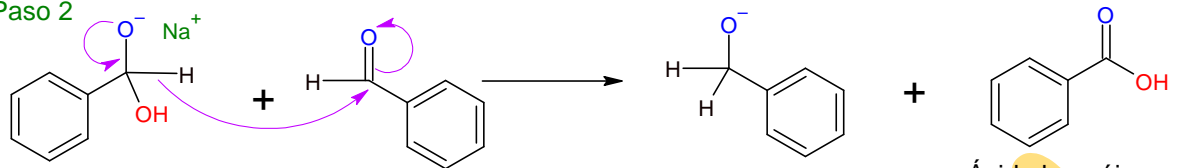


Mecanismo

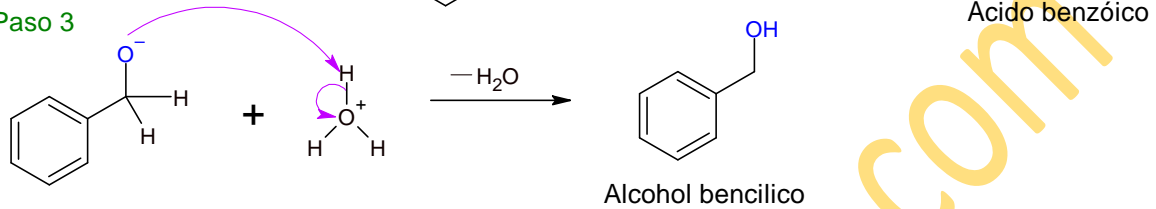
Paso 1



Paso 2

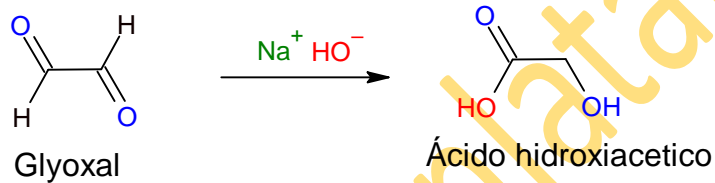


Paso 3



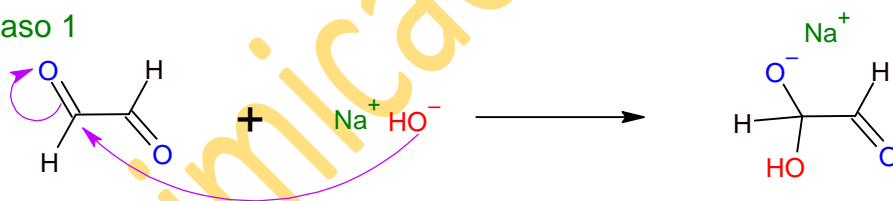
## 12. Cannizzaro Intermolecular

Cannizzaro Cruzada

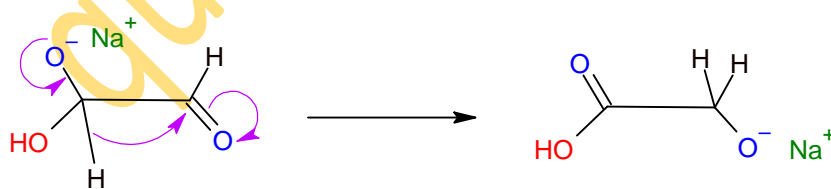


Mecanismo

Paso 1



Paso 2



Paso 3

