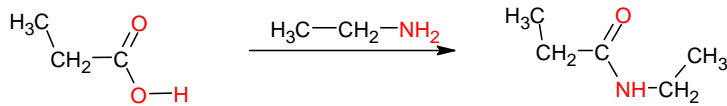


# Apoyo 3er Departamental | ESIQIE 21/1 |

## 👉 Síntesis de **Amidas** | Mecanismos

### 1. Síntesis directas de amidas

#### Conversión a amidas

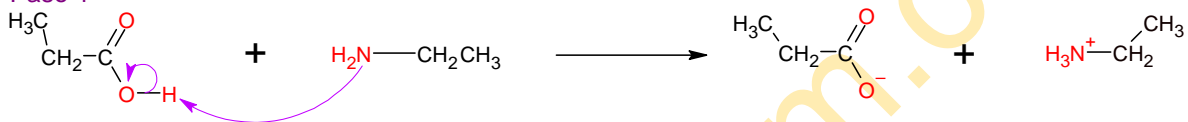


Ácido Propanoico

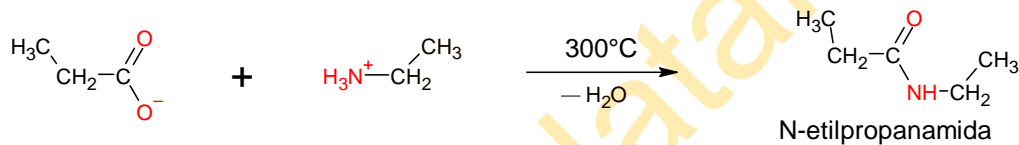
N-etilpropanamida

#### Mecanismo

##### Paso 1



##### Paso 2

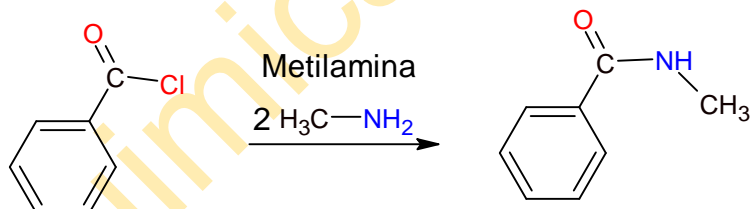


N-etilpropanamida

Al calentar esa sal por arriba de los 100°C, se separa el vapor y se forma una amida. Esta síntesis directa es un proceso industrial importante

### 2. Usando cloruros de ácido

#### Amidas usando cloruros de ácido

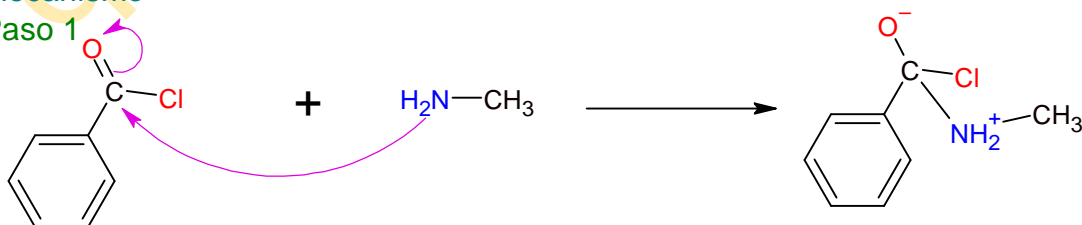


Cloruro de benzoilo

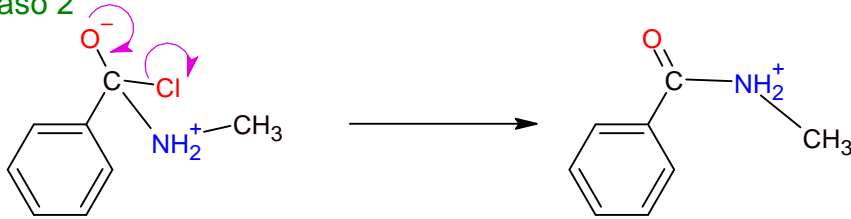
N-metilbenzamida

#### Mecanismo

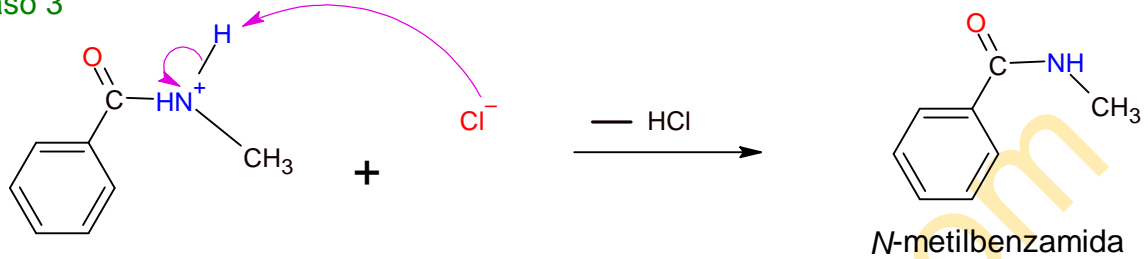
##### Paso 1



Paso 2

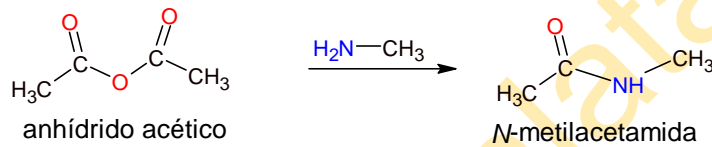


Paso 3



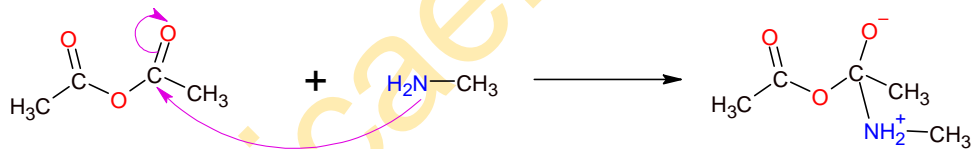
### 3. Usando Anhídridos de ácido

Amidas usando anhídridos de ácido

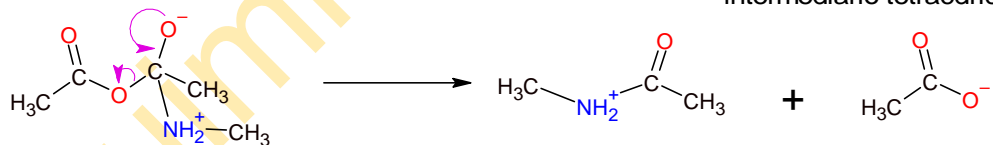


Mecanismo

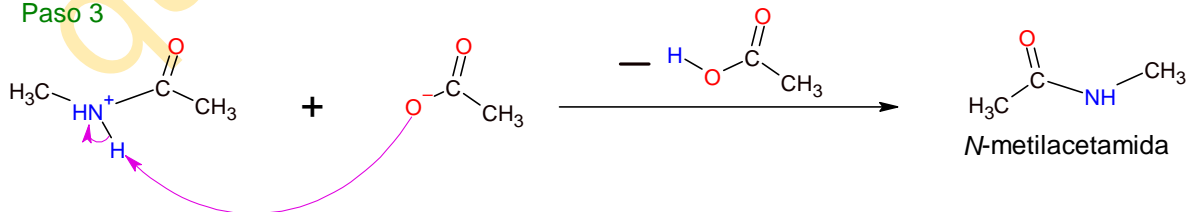
Paso 1



Paso 2

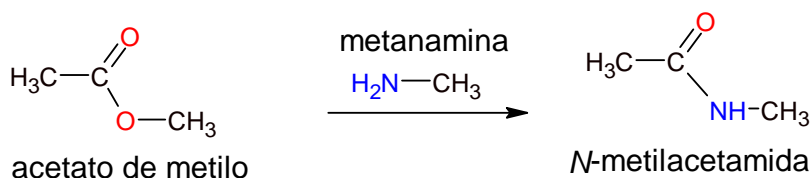


Paso 3



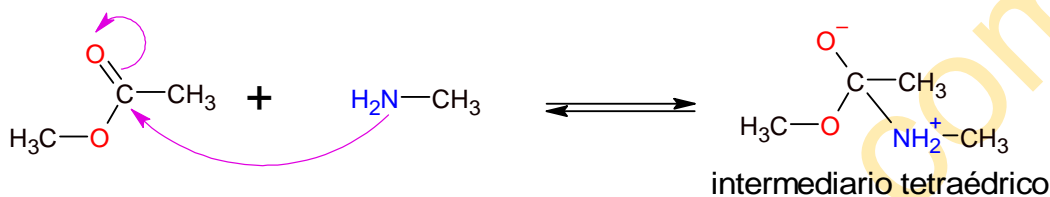
## 4. Usando un Éster (Amonólisis)

### Amonólisis de un éster

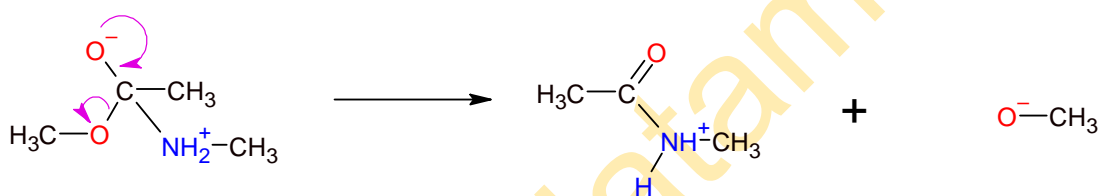


### Mecanismo

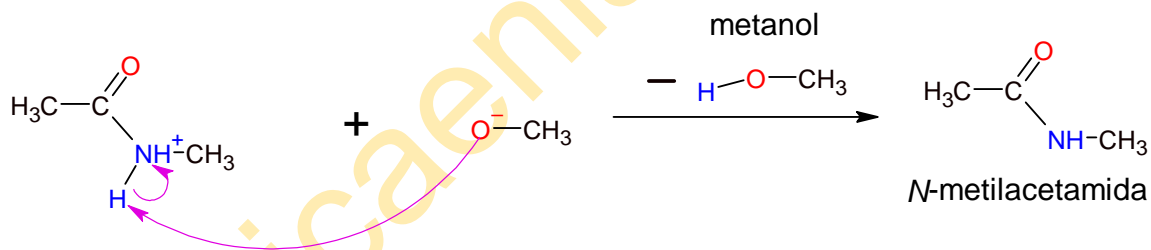
#### Paso 1



#### Paso 2

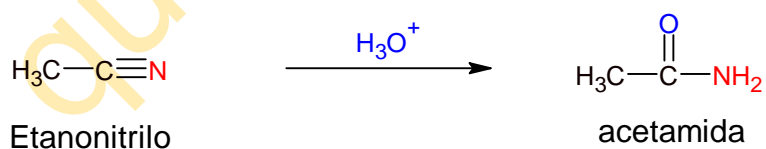


#### Paso 3



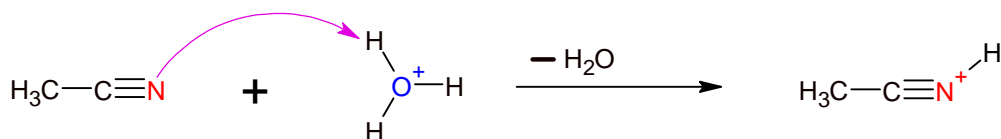
## 5. Hidrolisis de Nitrilos en Medio Ácido

### Hidrolisis de Nitrilos medio ácido

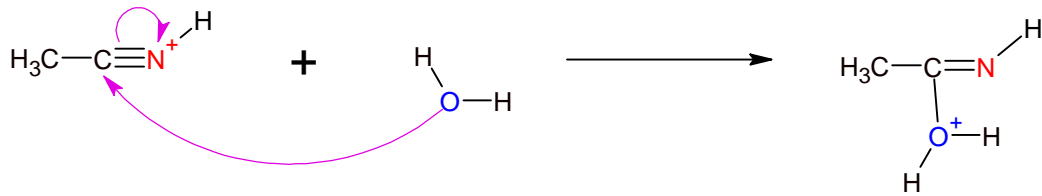


### Mecanismo

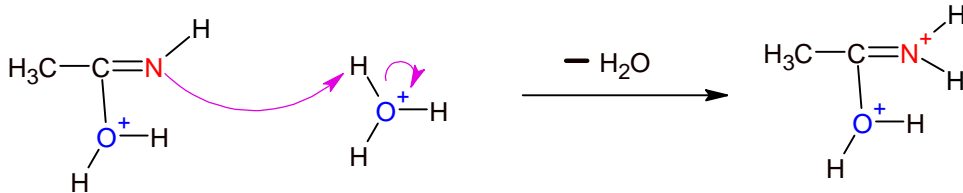
#### Paso 1



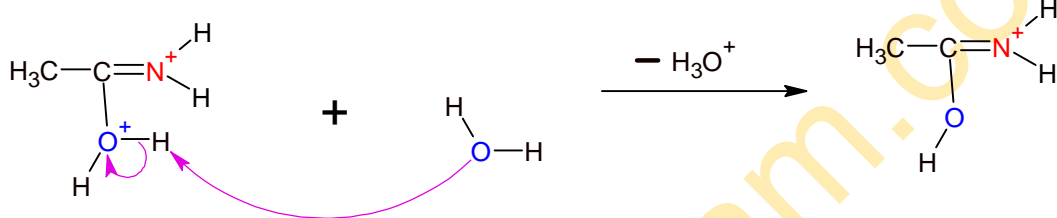
Paso 2



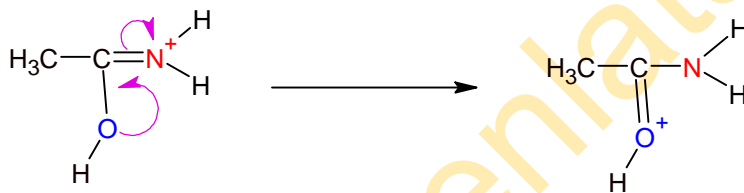
Paso 3



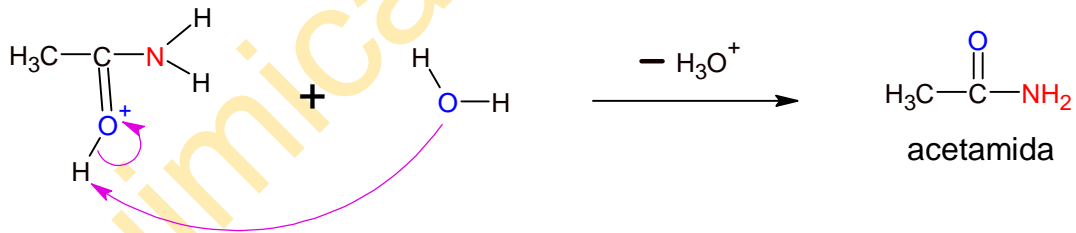
Paso 4



Paso 5

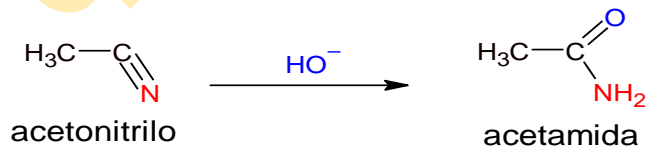


Paso 6



## 6. Hidrolisis de Nitrilos en Medio Básico

### Hidrolisis de Nitrilos

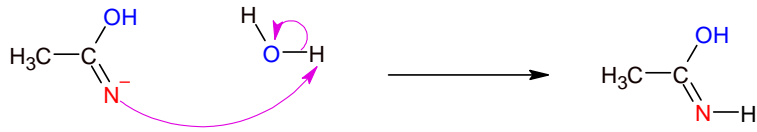


### Mecanismo

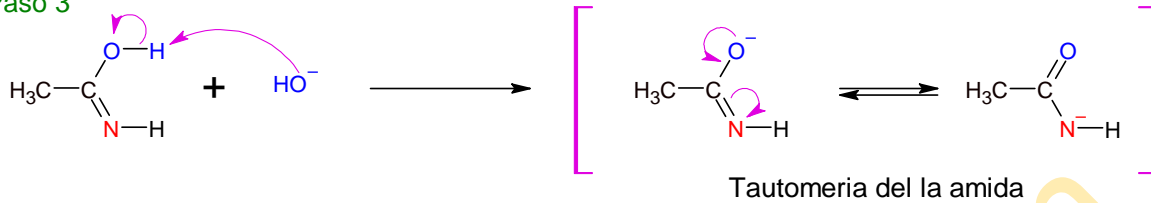
#### Paso 1



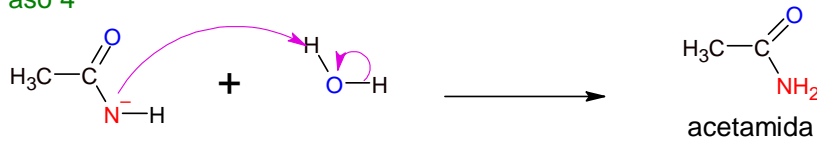
Paso 2



Paso 3



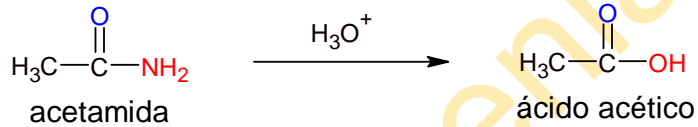
Paso 4



## Reacciones de **Amidas** | Mecanismos

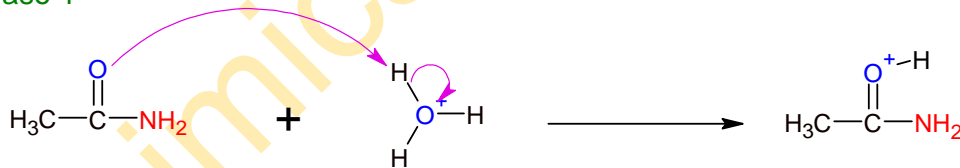
### 1. Hidrolisis ácida de amidas

#### Hidrolisis de Amidas

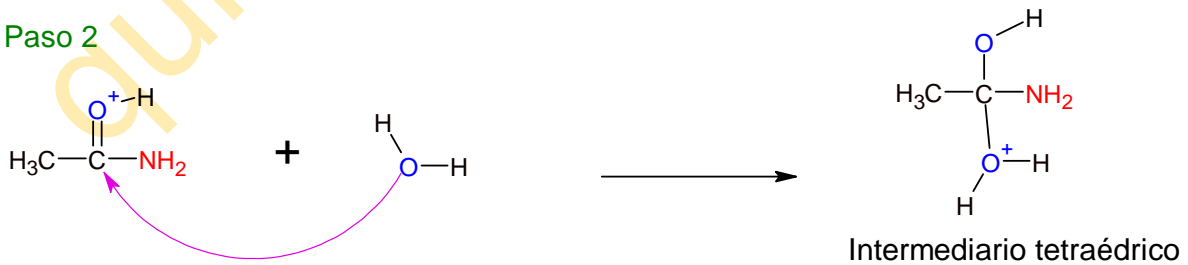


#### Mecanismo

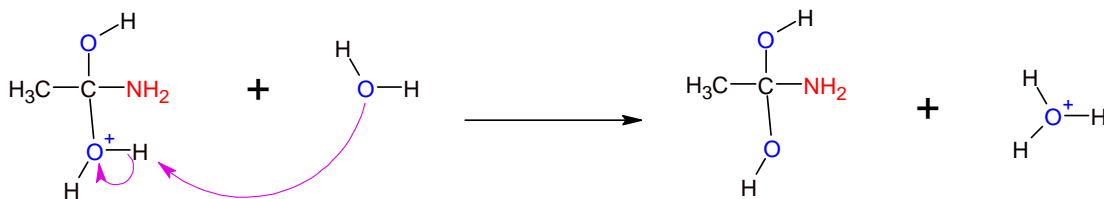
##### Paso 1



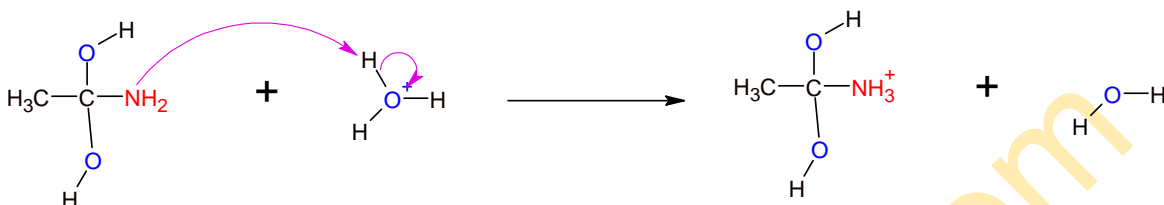
##### Paso 2



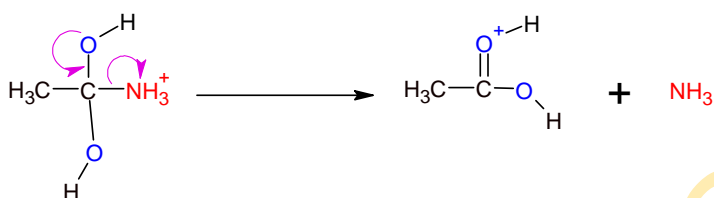
Paso 3



Paso 4



Paso 5

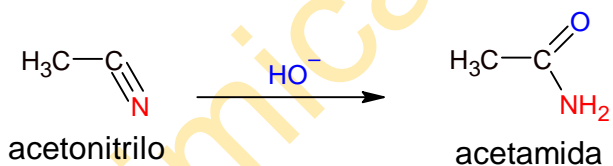


Paso 6



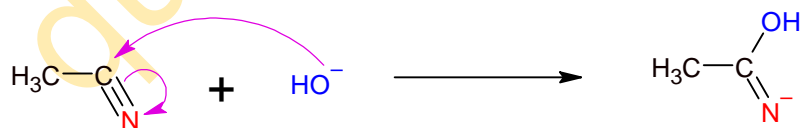
## 2. Hidrolisis básica de amidas

### Hidrolisis de Nitrilos

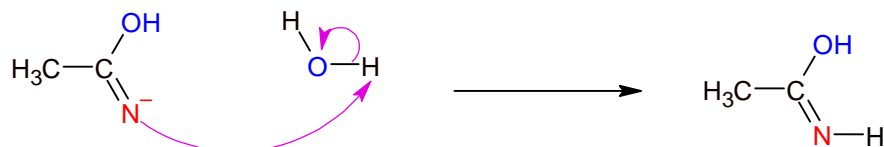


### Mecanismo

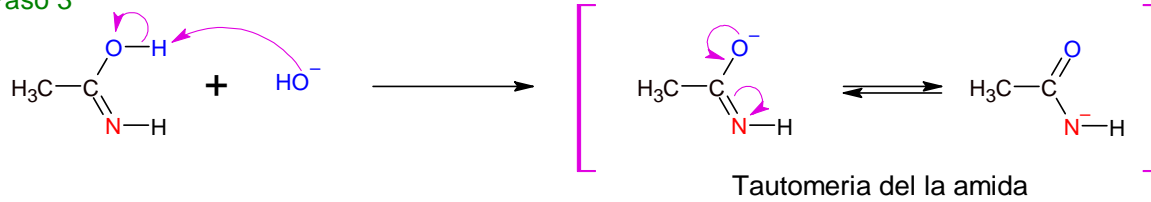
Paso 1



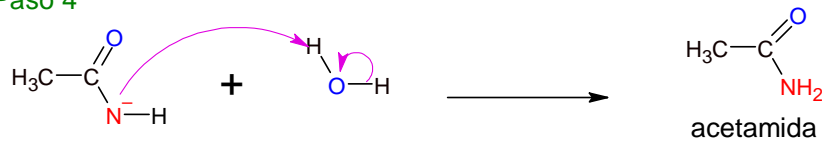
Paso 2



Paso 3

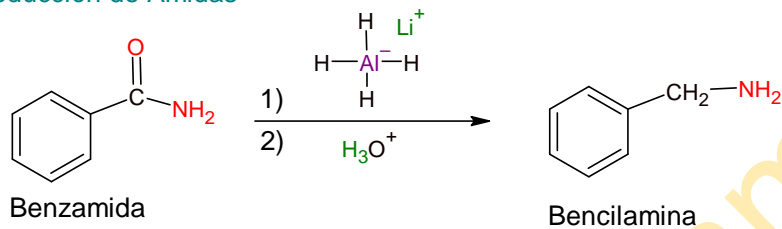


Paso 4



### 3. Reducción de Amidas a Aminas

Reducción de Amidas

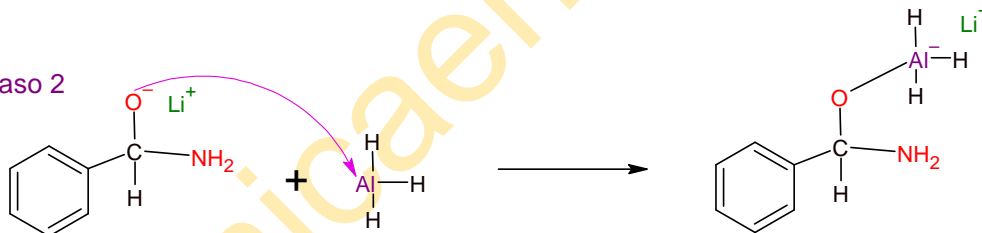


Mecanismo

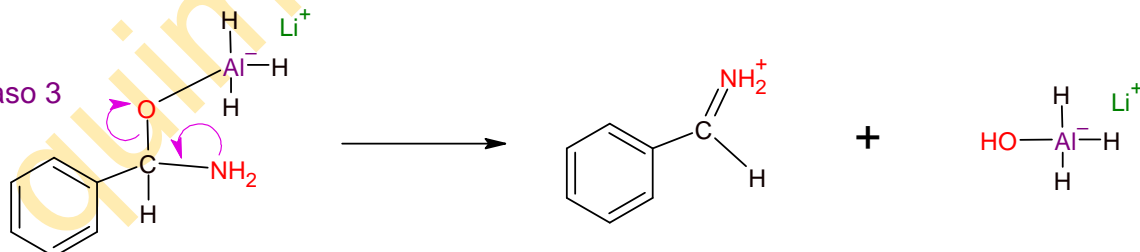
Paso 1



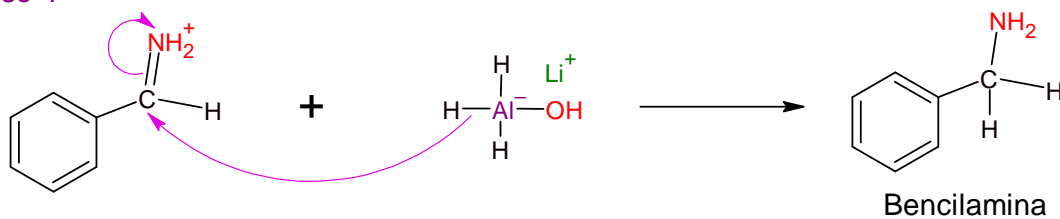
Paso 2



Paso 3



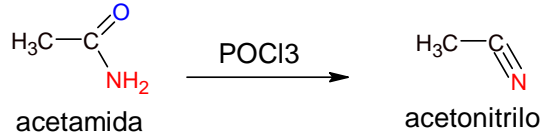
Paso 4



## 4. Deshidratación de una amida para obtener nitrilos

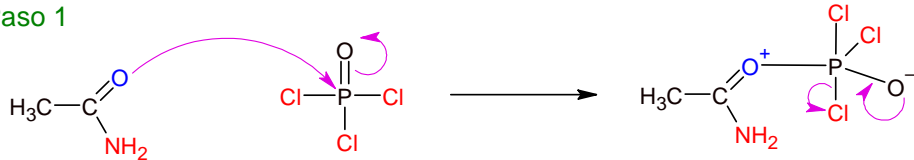
$POCl_3$

Deshidratación de amidas para obtener Nitrilos

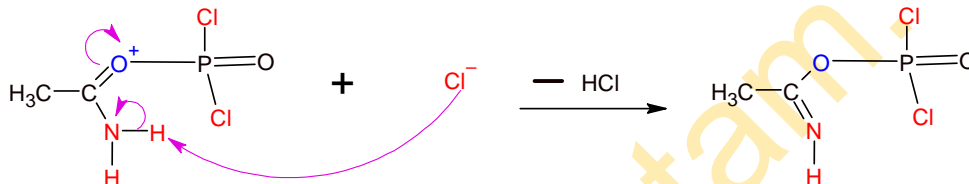


Mecanismo

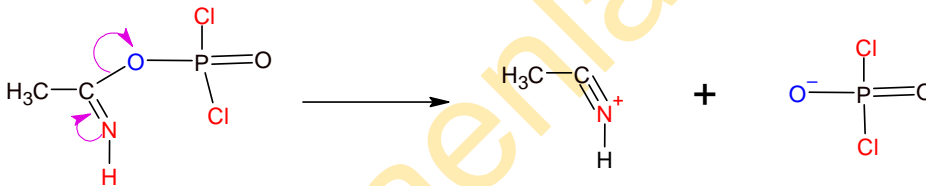
Paso 1



Paso 2



Paso 3



Paso 4

