

CO3 – Dérivés d'acides carboxyliques

1. Synthèse et hydrolyse d'esters

1.1. Estérification de Fischer

1.2. Estérification par les acides activés

- 1.2.1. Activation des acides
- 1.2.2. Obtention d'esters

1.3. Polyesters

1.4. Hydrolyses

- 1.4.1. En milieu acide
- 1.4.2. Saponification

1.5. Esters en stratégie de synthèse

- 1.5.1. Obtention d'alcools
- 1.5.2. Protection de fonction

2. Synthèse et hydrolyse d'amides

2.1. Synthèse à partir des acides activés

2.2. Polyamides

2.3. Peptides et protéines

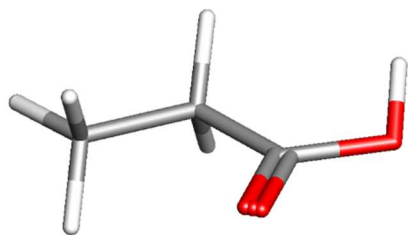
2.4. Hydrolyse

2.5. Amides en stratégie de synthèse

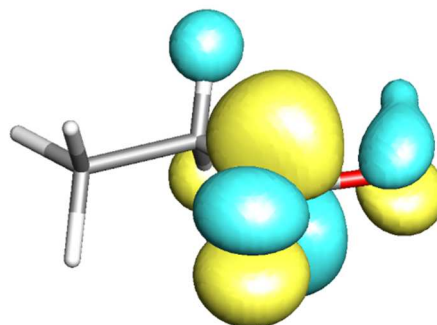
3. Propriétés redox des dérivés d'acide

3.1. Réduction des esters

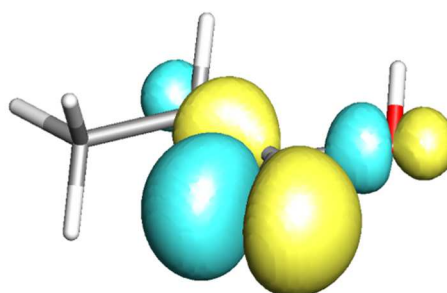
3.2. Stratégie de synthèse dans la conversion alcool/acide



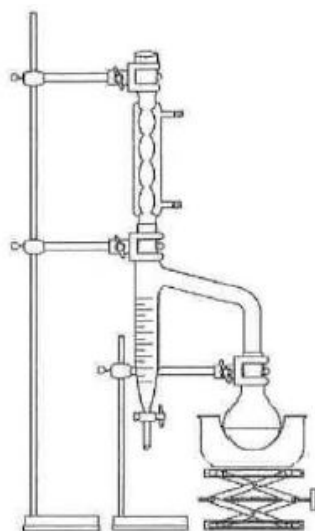
acide propanoïque



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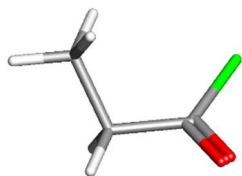


HOMO

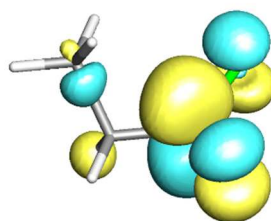


Appareil de Dean-Stark

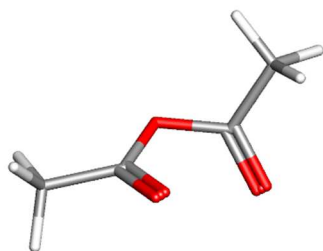
LUMO de quelques dérivés d'acides :



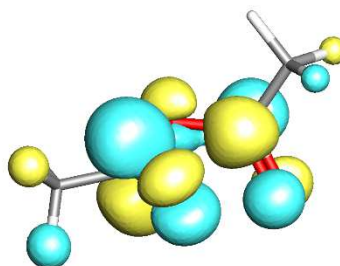
chlorure de propanoyle



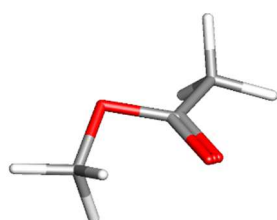
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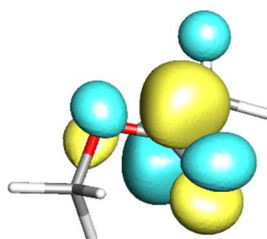
anhydride éthanoïque



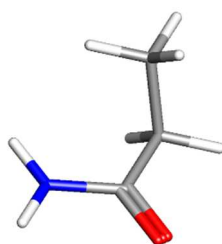
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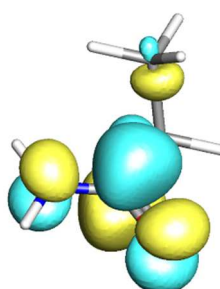
éthanoate de méthyle



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propanamide

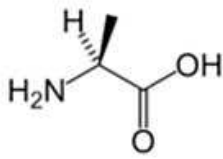
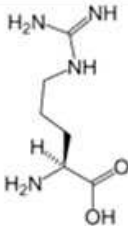
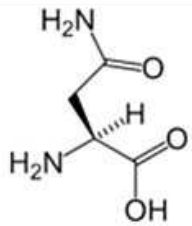
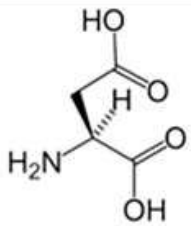
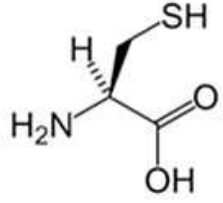
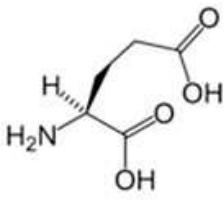
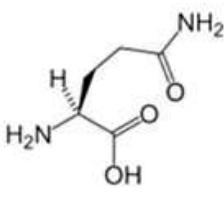
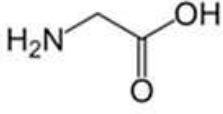
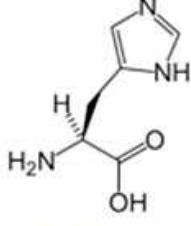
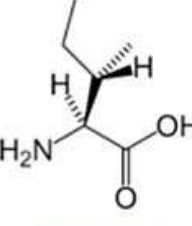
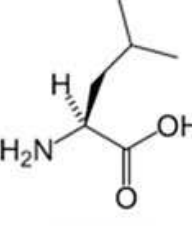
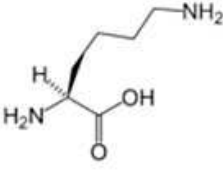
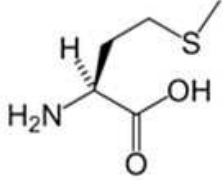
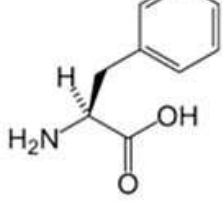
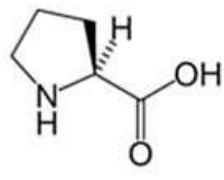
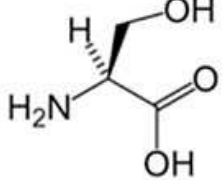
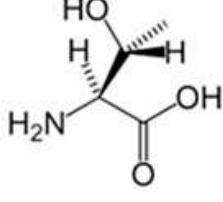
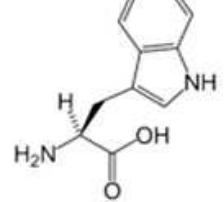
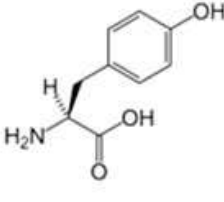
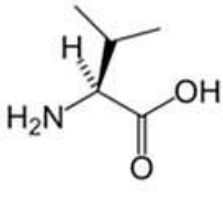


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Électrophilie des dérivés d'acide :

dérivé d'acide	E_{BV} (eV) (calcul Jimp2)
éthanamide	3,89
éthanoate de méthyle	2,90
acide éthanoïque	2,23
anhydride éthanoïque	1,26
chlorure d'éthanoyle	-0,86

Acides aminés naturels :

 <p>Alanine</p>	 <p>Arginine</p>	 <p>Asparagine</p>	 <p>Acide aspartique</p>
 <p>Cystéine</p>	 <p>Acide glutamique</p>	 <p>Glutamine</p>	 <p>Glycine</p>
 <p>Histidine</p>	 <p>Isoleucine</p>	 <p>Leucine</p>	 <p>Lysine</p>
 <p>Méthionine</p>	 <p>Phénylalanine</p>	 <p>Proline</p>	 <p>Sérine</p>
 <p>Thréonine</p>	 <p>Tryptophane</p>	 <p>Tyrosine</p>	 <p>Valine</p>