



Lista de Exercícios

Nomenclatura Orgânica: Éteres

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1. Introdução

Éter é um grupo de moléculas orgânicas, em que as suas estruturas são caracterizadas pela presença de um átomo de oxigênio ligado a dois (e entre estes) de carbono da cadeia. Podem ser formados pela desidratação intermolecular de alcoóis, ou seja são compostos orgânicos derivados teoricamente dos alcoóis pela substituição do H do grupo -OH por um radical derivado de hidrocarboneto.

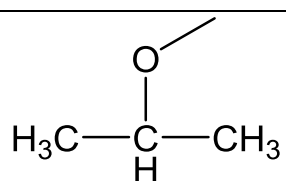
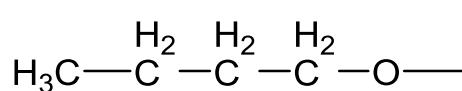
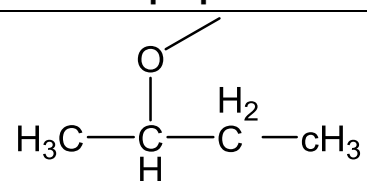
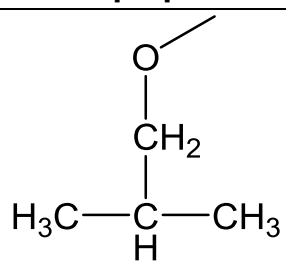
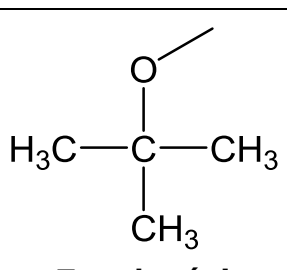
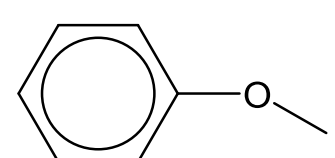
Sua fórmula genérica é: R-O-R', onde R e R' são radicais orgânicos (alquila ou arila).

2. Regras de nomenclatura (IUPAC)

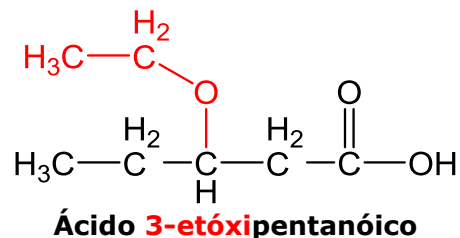
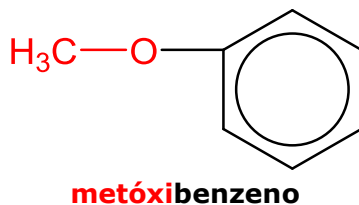
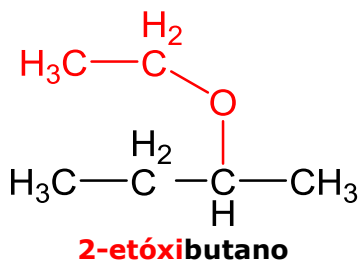
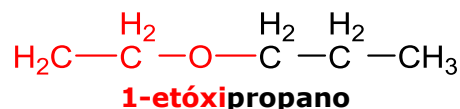
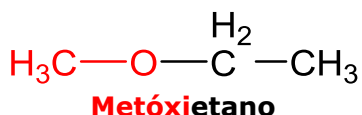
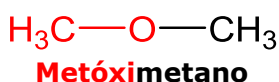
Para os Fenóis usamos a seguinte regra **IUPAC**:

NOME DO RADICAL ÉTER + PREFIXO + INFIXO + SUFIXO

2.1 Radicais Éter (mais comuns)

$\text{H}_3\text{C}-\text{O}-$ <p>Metóxi</p>	$\text{H}_3\text{C}-\overset{\text{H}_2}{\text{C}}-\text{O}-$ <p>Etóxi</p>	$\text{H}_3\text{C}-\overset{\text{H}_2}{\text{C}}-\overset{\text{H}_2}{\text{C}}-\text{O}-$ <p>N-propóxi</p>
 <p>Isopropóxi</p>	 <p>N-butóxi</p>	 <p>Sec-butóxi</p>
 <p>Isobutóxi</p>	 <p>Terc-butóxi</p>	 <p>Fenóxi</p>

2.2 Exemplos



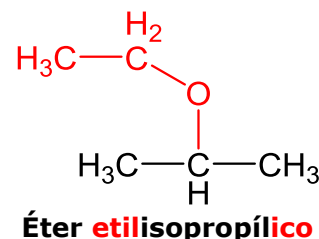
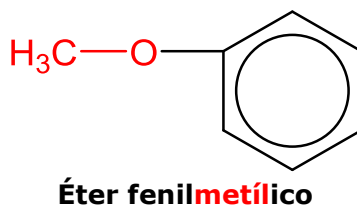
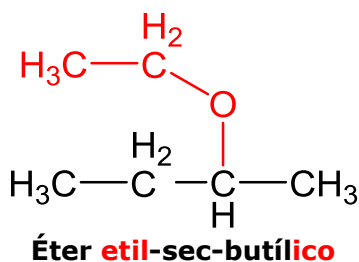
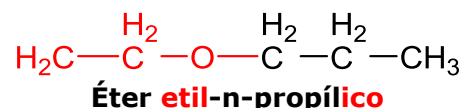
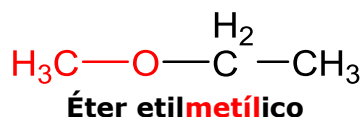
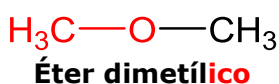
2.3. Nomenclatura Usual

Outra notação usual para éteres é:

Éter Radical 1 + Radical 2 + ico

Com os radicais colocados em ordem alfabética.

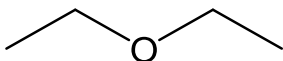
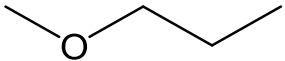
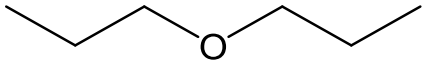
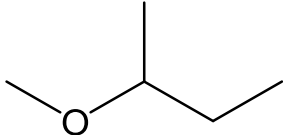
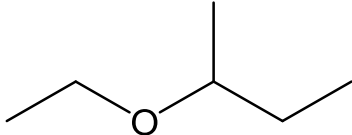
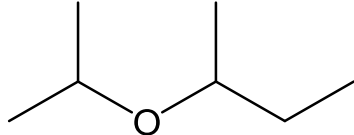
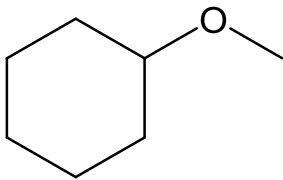
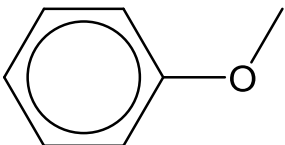
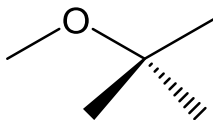
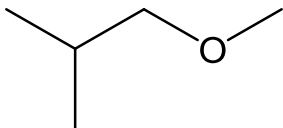
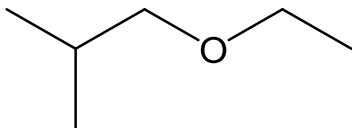
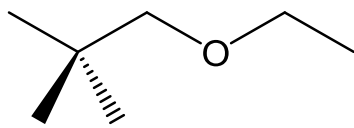
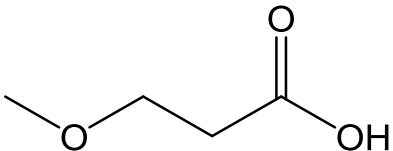
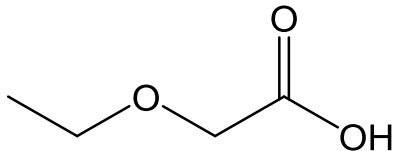
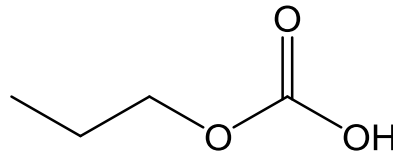
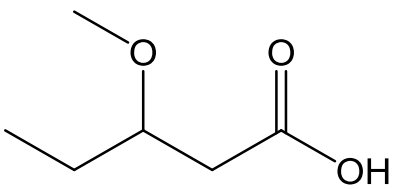
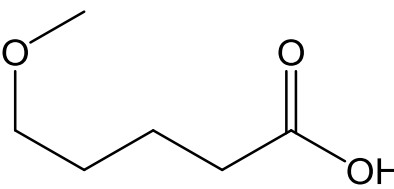
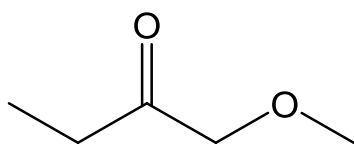
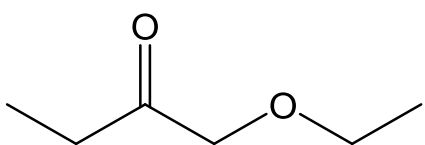
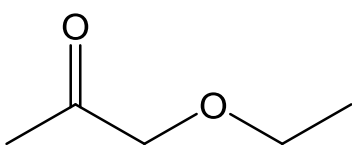
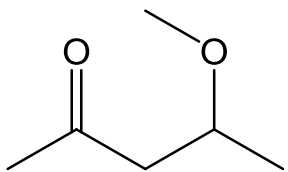
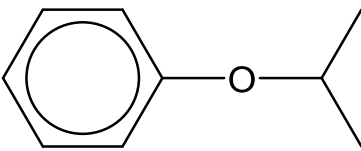
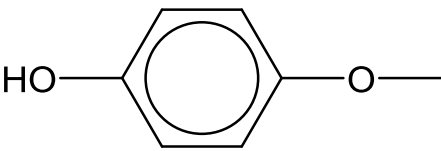
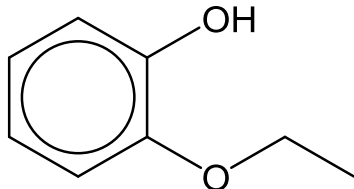
2.4. Exemplos de Nomenclatura Usual



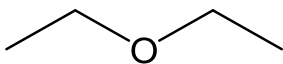
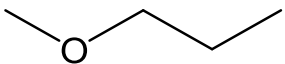
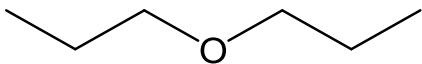
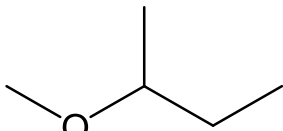
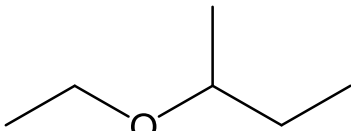
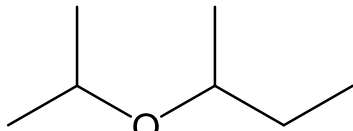
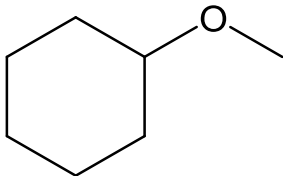
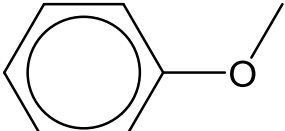
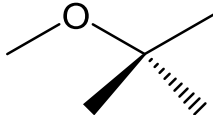
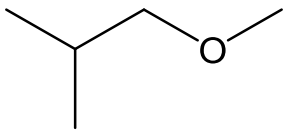
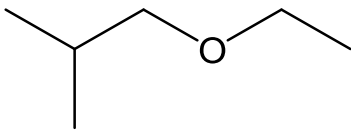
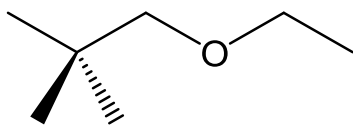
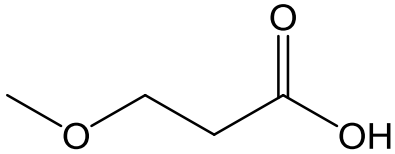
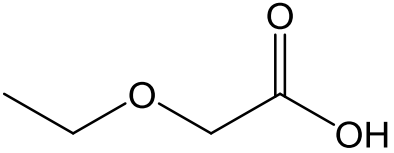
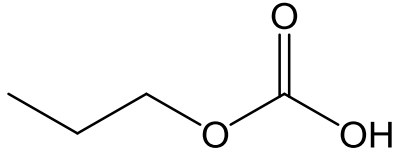
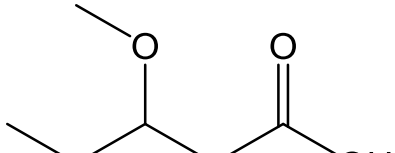
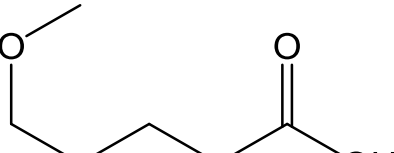
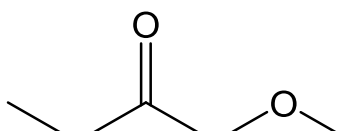
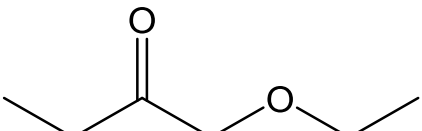
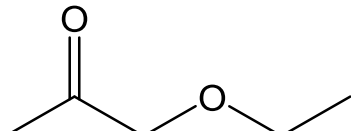
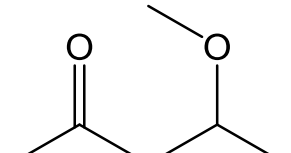
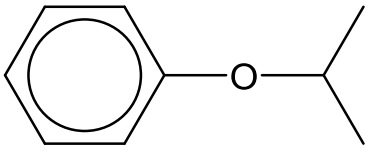
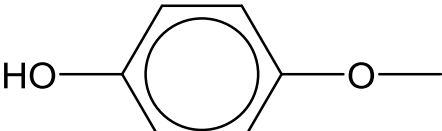
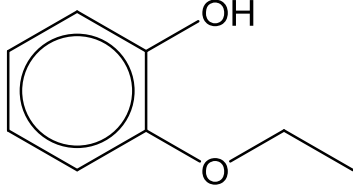
3. Observação

Éter é também o nome da substância que os filósofos, os naturalistas e posteriormente os físicos acreditavam que existia em todo o universo, mas sem massa, volume e indetectável, pois não provocaria atrito. Os físicos do séc. XIX sabiam que a luz tinha natureza ondulatória, e imaginavam portanto que essa deveria precisar de um meio para propagar-se. Daí o éter. Sabe-se hoje que essa substância não existe. Dada a característica de volatilidade do éter etílico e sua facilidade de produção a partir do etanol (álcool ou espírito de vinho) e do ácido sulfúrico (por isso mesmo, no passado tratado por éter sulfúrico), conhecida desde a época dos alquimistas, daí adveio a nomenclatura desta classe de compostos.

Dê os nomes dos seguintes compostos orgânicos:

GABARITO

 Etóxietano	 1-metóxiopropano	 1-n-propóxiopropano
 2-metóxiбутano	 2-etóxiбутano	 2-isopropóxiбутano
 Metóxiciclo-hexano	 Metóxiбenzeno	 2-metóxi-2-metilpropano
 1-metóxi-2-metilpropano	 1-etóxi-2-metilpropano	 1-etóxi-2,2-dimetilpropano
 Ácido 3-metóxiopropanóico	 Ácido etóxiacetanóico	 Ácido n-propóximetanóico
 Ácido 3-metóxiacetanóico	 Ácido 5-metóxiacetanóico	 1-metóxiбутanona
 1-etóxiбутanona	 1-etóxiopropanona	 4-metóxiacetan-2-ona
 isopropóxiбenzeno	 4-metóxiбfenol	 2-etóxiбfenol