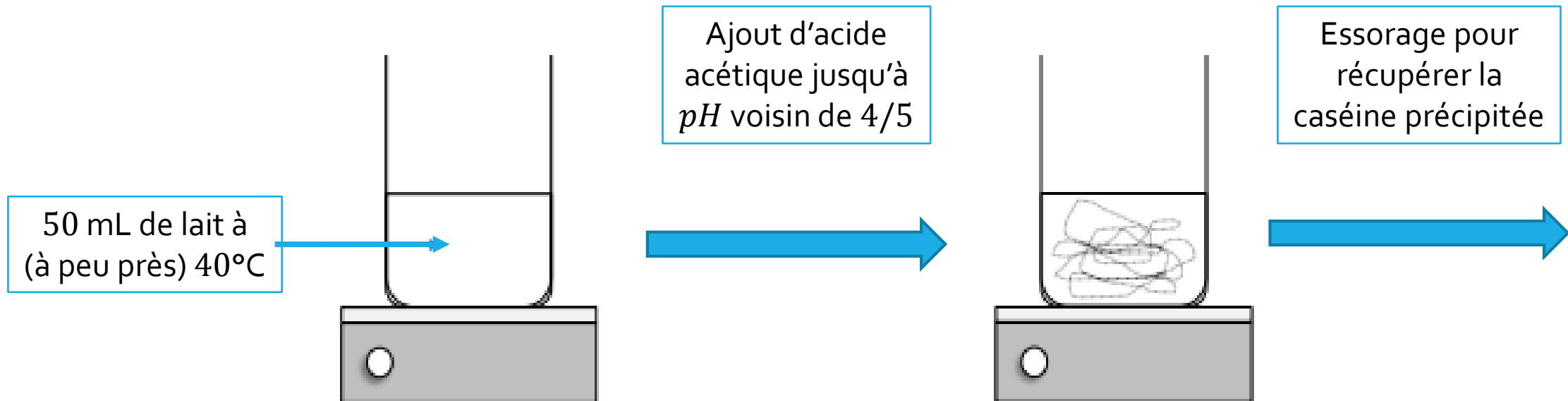


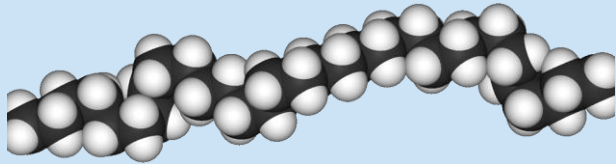
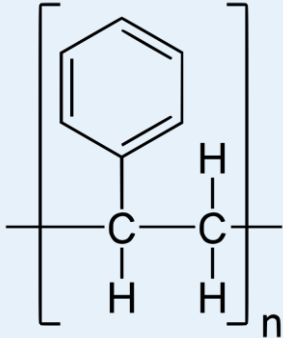
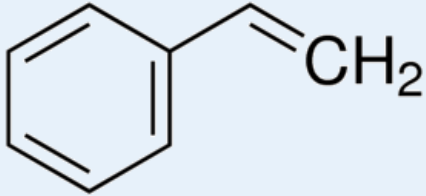
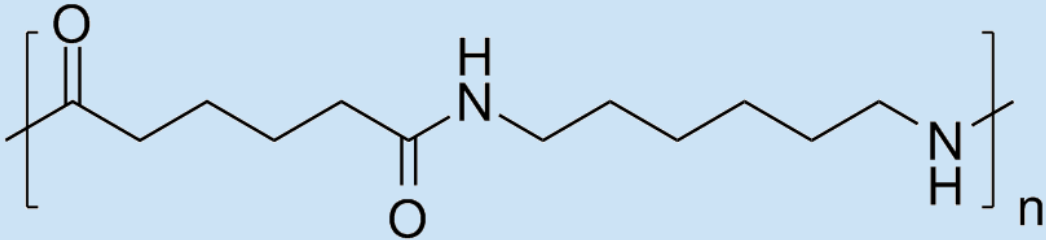
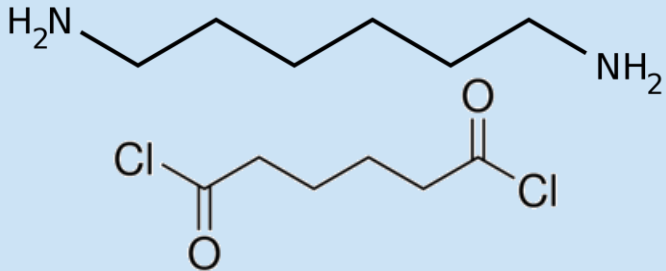
LC2

Polymères

Introduction



Exemples de polymères synthétiques

Nom	Représentation	Monomère
Polyéthylène	$\left(\begin{array}{cc} \text{H} & \text{H} \\ & \\ -\text{C} & -\text{C}- \\ & \\ \text{H} & \text{H} \end{array} \right)_n$ 	$\begin{array}{c} \text{H} & & \text{H} \\ & \backslash & / \\ & \text{C} = \text{C} \\ & / & \backslash \\ \text{H} & & \text{H} \end{array}$
Polystyrène		
Nylon (6-6)		

Utilisation courante des polymères synthétiques



Nylon pour des collants

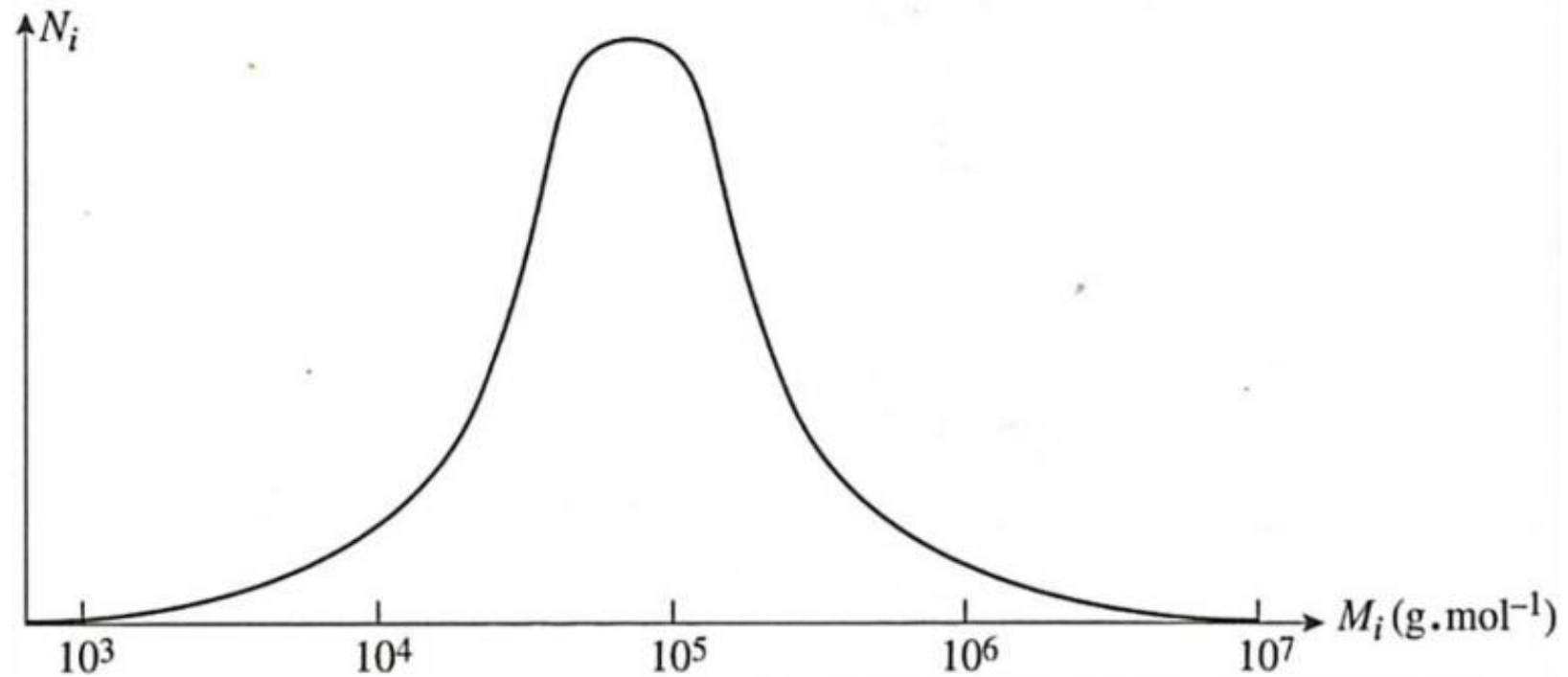


Polyéthylène pour des emballages :
Ex: mouchoirs jetables



Polystyrène pour l'isolation des
bâtiments

Distribution de la masse Molaire de macromolécules dans un polymère

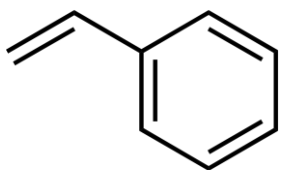


Synthèse du polystyrène - Polyaddition

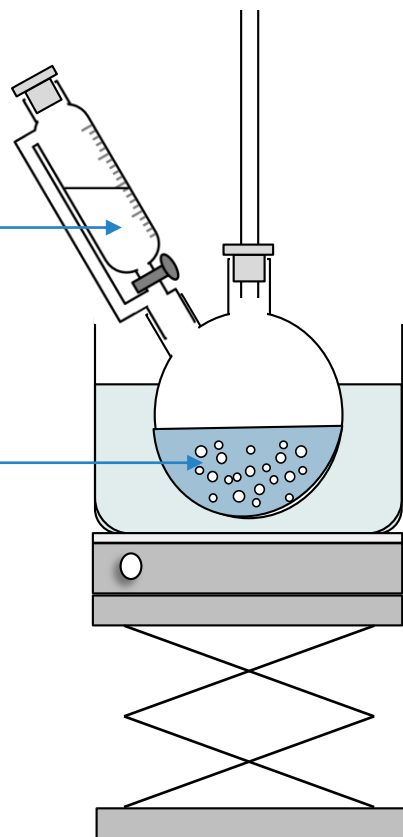
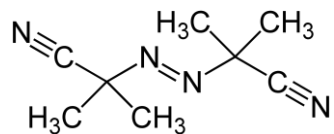
1

Toluène
(10 mL)

Styrène (5,0 mL)

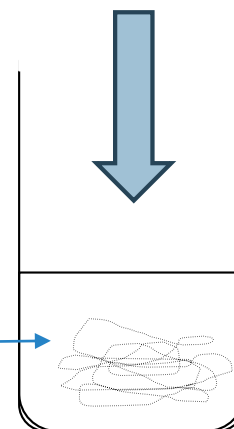


+ AIBN (2,0 mL)



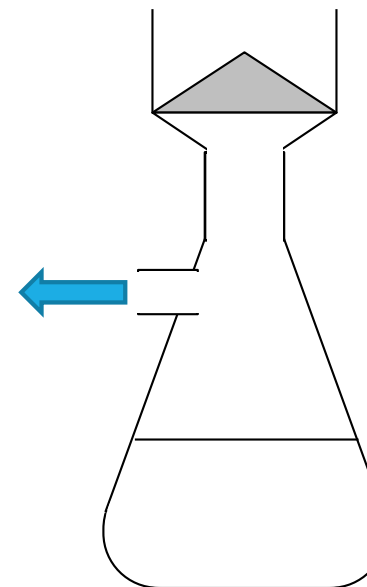
2

Éthanol



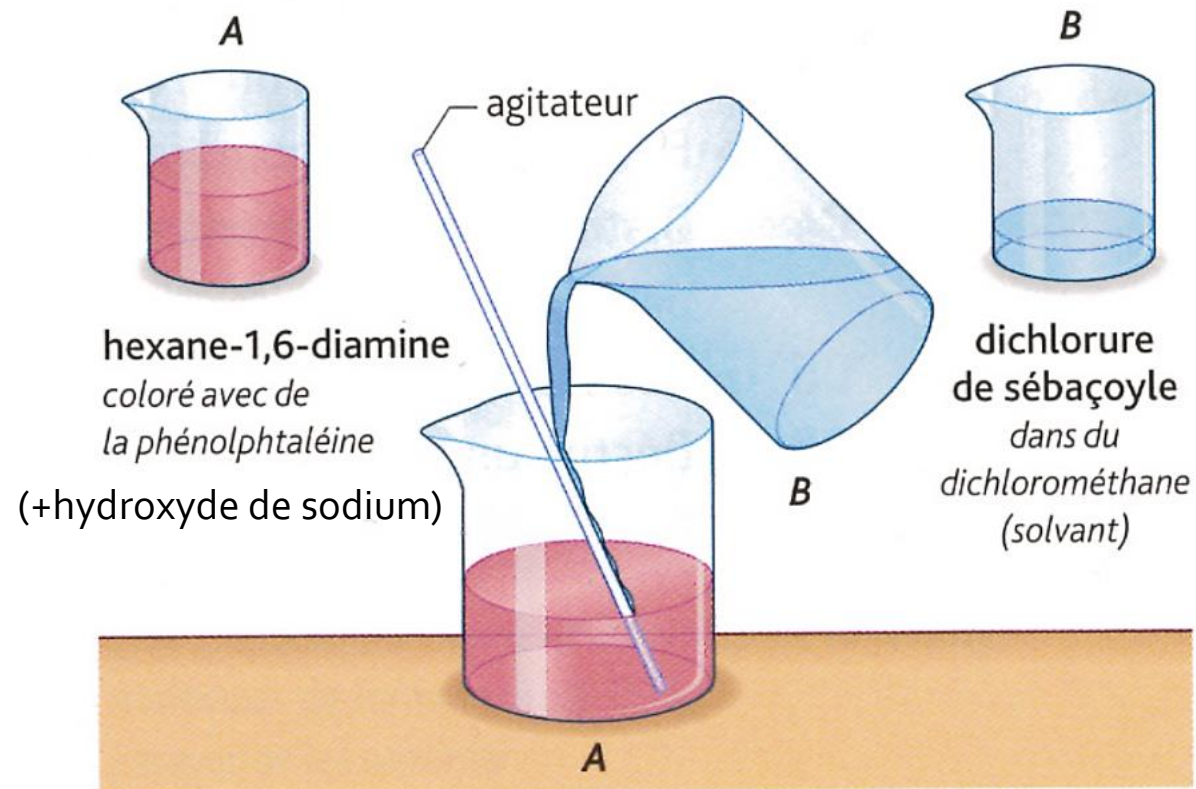
Isolement du polystyrène

3

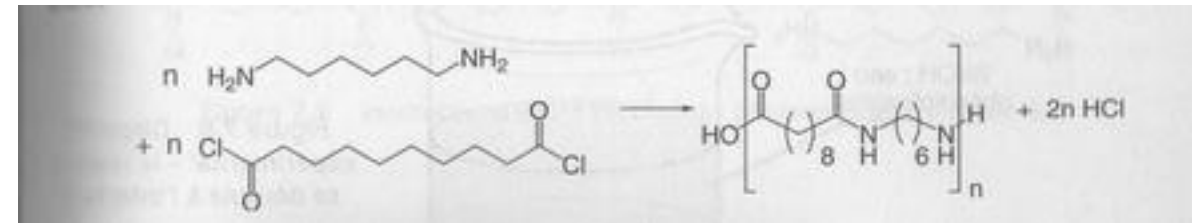


Essorage sous pression réduite

Synthèse du Nylon 6-10 - Polycondensation

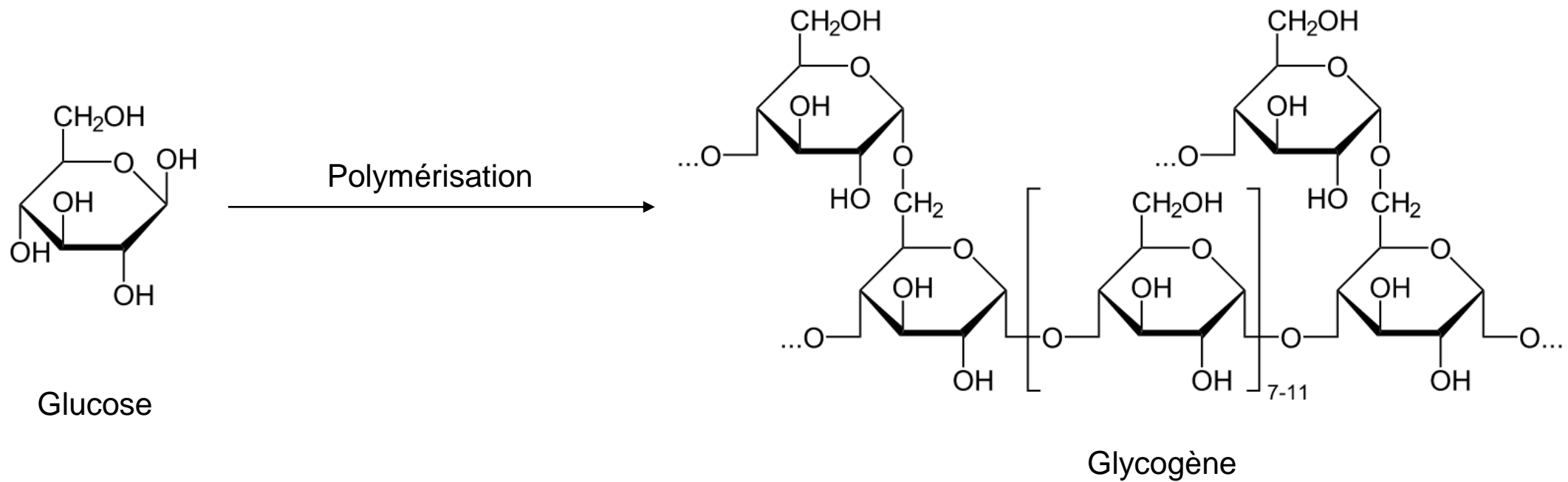


l'hexane-1,6-diamine

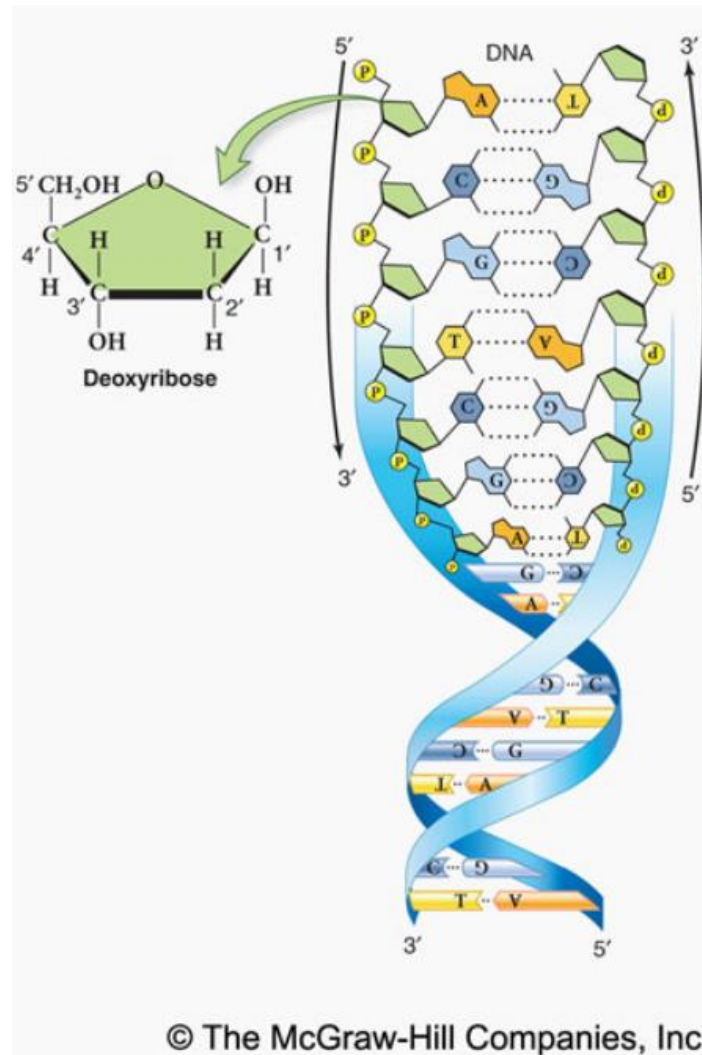


chlorure de l'acide décandioïque

Polymérisation dans le foie



ADN deux macromolécules



Boutons de galalithe



Pont Hydrogène entre macromolécules du nylon

