

Application of Le Chatelier Principle

Introduction: Application of Le Chatelier's Principle is very important in industry as it can be used to predict conditions necessary for reversible reactions to give maximum yield.

+ Le Chatelier's Principle

[Animation](#)

- This principle is used to describe changes that occur in a system that has achieved equilibrium. There are three factors that can cause shifts in a system at equilibrium: concentration, pressure, and temperature.

<u>Change</u>	<u>Direction System Shifts to Reestablish Equilibrium</u>
Adding a reactant	Shifts towards products
Adding a product	Shifts towards reactants
Removing a reactant	Shifts towards reactants
Removing a product	Shifts towards products
Increasing pressure (decreasing volume)	Shifts toward less gas molecules
Decreasing pressure (increasing volume)	Shifts towards more gas molecules
Adding an inert gas	No effect
Increasing the temperature	Endothermic: shifts towards products Exothermic: shifts towards reactants
Decreasing the temperature	Endothermic: shifts towards reactants Exothermic: shifts towards products

LO 6.8: The student is able to use LeChatelier's principle to predict the direction of the shift resulting from various possible stresses on a system at chemical equilibrium.

https://www.youtube.com/watch?v=PciV_Wuh9V8&feature=emb_logo

<https://www.slideshare.net/KellyAnnR/le-chateliers-principle-14234505?ref=https://notesmaster.com/en/group/caribbean/1556-cape-covid19-support/24606-application-of-le-chateliers-principle>