

#62971 Chemistry, Other

Ethyl alcohol has a latent heat of vaporization of 850 J/g. Water has a latent heat of vaporization of 2260 J/g. Container A contains 1.0 kg of ethyl alcohol. Container B contains 1.0 kg of water. Both liquids are brought to a boil. If the same amount of heat is continuously added to each container, which liquid will boil away first?

Answer:

As Ethyl alcohol has lower latent heat vaporization, under equal conditions it will boil away first. Water will need more time to get enough amount of heat for this.