

Answer on Question #59793 – Chemistry – General Chemistry

Question:

Mount McKinley in Alaska is the tallest peak in North America with a summit at 20,320 ft, or 6194 m. It is also known as Denali, meaning "the high one" in the native Koyukon Athabaskan language. The average atmospheric pressure at the top of Denali is approximately 330 torr. Use Figure 13.7 (the curve shows a temperature of 79 celsius at 330 torr) to determine the approximate boiling temperature of water on Denali.

Answer:

First of all, **330 torr** is equal to 43.993 kPa \approx **44 kPa**

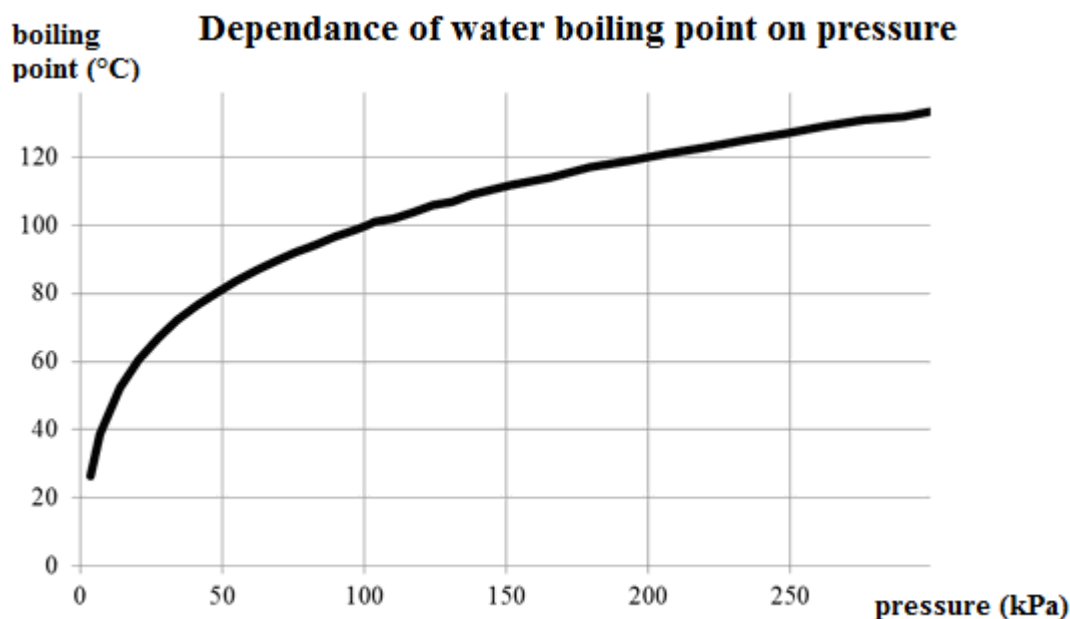


Fig. 1: Dependence of boiling point of water on pressure

From Fig. 1. we can determine that boiling point of water at 44 kPa is approximately **79 C°**.