13 A 350 cm^3 cup of hot tea takes 30 minutes to cool down from an initial temperature of 90 ºC to 30 ºC.

The specific heat capacity of tea is 4200 J kg^{-1} K^{-1} and its density is 1000 kg m^{-3}.

What is the average rate of heat loss of the tea?

A 49 W **B** 2900 W **C** 4.9×10^4 W **D** 2.9×10^6 W