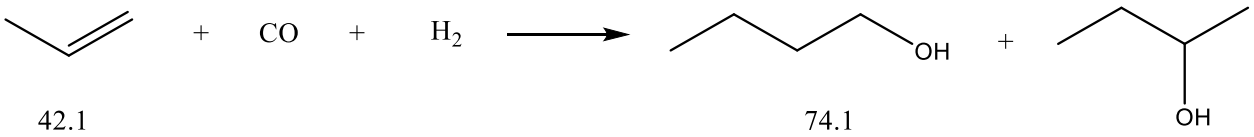
Exercise 5

The following hydroformylation process uses 609 kg/h propene, 406 kg/h CO and 58 kg/h H2 to obtain 1000 kg/h n-butanol and 50 kg/h isopropanol. The process also requires 208 kW electricity and heating power (steam) of 630 kW.

What is the yield of the desired n-butanol and the energy intensity referred to n-butanol?



42.1 74.1