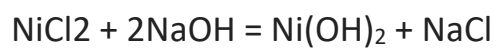What is the maximum mass of Ni(OH)2 that could be prepared by mixing two solutions that contain 26.0g of NiCl2 and 10.0g NaOH, respectively?

Solution.

NiCl2 + 2NaOH = Ni(OH)$_2$ + NaCl

n(NiCl$_2$) = 0.2 mole

n(NaOH) = 0.25 moles (/2 = 0,125 moles - in deficiency)

⇨ n(Ni(OH)$_2$) = 0.125 mole

m(Ni(OH)$_2$) = 0.125 * 93 = 11.63 g

Answer. 11.63 g