Questions from the "PAL Prüfungsbuch" Stoichiometry

All tasks are to be scored with 10 to 0 points

U37 Calc pro ρ (Ν ρ (Ν	U37: Calculate which volume V_1 (in mL) of an ammonia solution with $w(NH_3) = 25.0\%$ is to be used to produce $V_2 = 800$ mL of an ammonia solution with $w(NH_3) = 6.00\%$. ρ (NH ₃ ; 25.0%) = 0.917 g/mL ρ (NH ₃ ; 6.0%) = 0.973 g/mL																											
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U46:

By reducing V = 250 mL nitrobenzene C₆H₅NO₂, ρ = 1.204 g/mL, n = 2.11 mol aminobenzene (aniline), $C_6H_5NH_2$ is formed. Calculate the yield \mathbb{Z} (in %).

 $C_6H_5NO_2 + 3 H_2 \rightarrow C_6H_5NH_2 + 2 H_2O$

M(nitrobenzene) = 123.11 g/mol





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