$$k_5 = \frac{1}{\tau \cdot p_{C5} \cdot p_H} \cdot \frac{X_{C5}}{1 - X_{C5}} \qquad (8)$$

$$k_{C6} = \frac{1}{\tau \cdot p_{C6} \cdot p_{C6}} \cdot \frac{X_{C6}}{1 - X_{C6}} \qquad (9)$$

The parameters k_{C5} and k_{C6} [kmol h^{-1}bar^{-3}] were calculated for each set of experimental data and the mean value and relative errors were determined:
- k_{C5}=0.0043 with a medium error 6.5% and a maximum error 21.2%;
- k_{C6}=0.0534 with a medium error 6.1% and a maximum error 17.1%;