

ERRATUM

Volume 135, Number 2 (1992), in the article "Piperidine Hydrogenolysis on a Commercial Hydrocracking Catalyst. III. The Effects of Zeolite Unit Cell Size, Catalyst Sulfur Content, and Coke Deposition on Catalyst Activity and Deactivation," by G. C. Hadjiloizou, J. B. Butt, and J. S. Dranoff, pages 481-504: Equation (5) of the paper should read

$$r_i = k_i^o C_1^2 s_i = \frac{k_i^{o''} K_{\text{pip}_i}^2 C_1^2 s_i}{(1 + K_{\text{pip}_i} C_1)^2} \quad (5)$$

Reference (10) should read

10. Hadjiloizou, G. C., Butt, J. B., and Dranoff, J. S., *J. Catal.* **135**, 27 (1992).

The following Nomenclature section was inadvertently omitted.

NOMENCLATURE

a_i	Decay parameter for the formation of product i , $\text{min}^{-0.5}$.	k_d^*	Apparent rate constant of overall deactivation reaction, min^{-1} .
C_1	Concentration of piperidine, g mol/liter.	k_i	Reaction rate constant of formation of product i .
C_{1_0}	Initial concentration of piperidine, g mol/liter.	$k_i^o, k_i^{o''}$	Initial reaction rate constants of formation of product i , $\text{liter}^2/\text{g mol/g cat/min}$ and g mol/g cat/min , respectively.
D	Average deviation, defined as $D = (1/m) \sum_m \{ k_{i,\text{obs},m}^{o''} - k_{i,\text{pred},m}^{o''} / k_{i,\text{obs},m}^{o''} \} \times 100$.	$k_{ij}^{*'}, k_{ij}^{o''}$	Rate constants of formation of product i on catalyst j , as defined in Eq. (6).
E_{d_i}	Activation energy of overall deactivation, kcal/g mol.	k_i^o	Initial rate constant of overall reaction, $\text{liter}^2/\text{g mol/g cat/min}$.
F_{1_0}	Reactor inlet molar flow rate of piperidine, g mol/min.	N_{ij}^o	Initial total number of sites active for formation of product i on catalyst j .
i	Index: $i = 2 = N$ - n -pentylpiperidine, $i = 3 = 2$ - n -pentylpiperidine, $i = 4 =$ decahydroquinolines.	n^*	Order of concentration dependency of deactivation.
K_{pip_i}	Adsorption equilibrium constant for piperidine associated with formation of product i , liter/g mol .	pip	Piperidine.
K'_{pip_i}	Preexponential factor of K_{pip_i} , liter/g mol .	R	Gas constant, kcal/g mol/K.
k_{d_i}	Rate constant of overall deactivation reaction, liter/g mol/min .	R^2	Coefficient of determination for regression analysis.
k'_{d_i}	Preexponential factor of k_{d_i} , liter/g mol/min .	r_i	Reaction rate of formation of product i , g mol/g cat/min .
		s_i	Activity of catalyst at time on stream t for formation of product i .
		T	Absolute temperature, K.

t	Time on stream, min.	x_i^0	Initial total conversion of piperidine.
W	Weight of catalyst, g.		
x_i	Conversion of piperidine to product i at time on stream t .	<i>Greek Symbols</i>	
x_i^0	Initial conversion of piperidine to product i .	ΔH_{pip_i}	Enthalpy change of adsorption of piperidine associated with formation of product i , kcal/g mol.
x_t	Total conversion of piperidine at time on stream t .	τ	Space time = $WC_{1_0}^2/F_{1_0}$, g mol · g cat · min/liter ² .