

Effect of alkyl chain length on the electrochemical perfluorination of *n*-alkane (C₆–C₁₀) carboxylic acid chlorides

N. Ilayaraja · A. Manivel · D. Velayutham · M. Noel

Published online: 10 November 2007
© Springer Science+Business Media B.V. 2007

Erratum to: J Appl Electrochem (2007)
DOI 10.1007/s10800-007-9421-2

Unfortunately some mistakes were introduced during the typesetting of Tables 5 and 6. Please find the corrected versions below.

Table 5 Selectivity of alkali insoluble perfluoro products obtained from ECPF of *n*-alkane carboxylic acid chlorides

No.	Reactants	^b Perfluorinated products obtained from alkali insoluble fraction/mole %				
		Perfluoro- <i>n</i> -alkane	Perfluoro-iso-alkane	Perfluoro oxolane	Perfluoro oxane	^a Other cleavage products
1.	<i>n</i> -hexanoyl chloride	40.4	4.7	23.4	5.9	26.4
2.	<i>n</i> -heptanoyl chloride	38.9	3.4	25.0	6.2	26.5
3.	<i>n</i> -octanoyl chloride	43.6	9.8	22.2	3.7	20.7
4.	<i>n</i> -nonanoyl chloride	41.3	10.9	20.9	3.4	23.5
5.	<i>n</i> -decanoyl chloride	39.5	11.5	18.2	4.2	26.7

Note. Perfluoro oxolane (Five membered cyclic ether) is more than Perfluoro oxane (six membered cyclic ether)

^a Other cleavage products are mainly lower alkanes

^b Based on ¹⁹F NMR

The online version of the original article can be found under doi:[10.1007/s10800-007-9421-2](https://doi.org/10.1007/s10800-007-9421-2).

N. Ilayaraja · A. Manivel · D. Velayutham · M. Noel (✉)
Electro Organic Division, Central Electrochemical Research
Institute, Karaikudi 630006, India
e-mail: yemenoeel@yahoo.co.in

Table 6 Overall product distributions obtained during ECPF of *n*-alkane carboxylic acid chlorides/mole %

Sl.	Reactants	^a Acid			^a Alkali insoluble				
		<i>n</i>	iso	others	Perfluoro <i>n</i> -alkane	Perfluoro <i>iso</i> -alkane	Perfluoro oxolane	Perfluoro oxane	Others
1.	Hexanoyl chloride	30.5	2.7	0.4	26.8	3.2	15.5	3.4	17.5
2.	Heptanoyl chloride	30.0	3.1	2.4	25.1	2.2	16.1	4.0	17.1
3.	Octanoyl chloride	22.5	2.9	5.8	30.0	6.7	15.3	2.6	14.2
4.	Nonanoyl chloride	21.0	3.2	5.1	29.2	7.7	14.7	2.4	16.7
5.	Decanoyl chloride	21.6	2.3	4.7	28.1	8.2	13.0	3.0	19.0

^a Based on ¹⁹F NMR