

Oligocarbonates in Lithium Ion Battery Electrolyte by LC-IT-TOF-MS

Application #AN4880

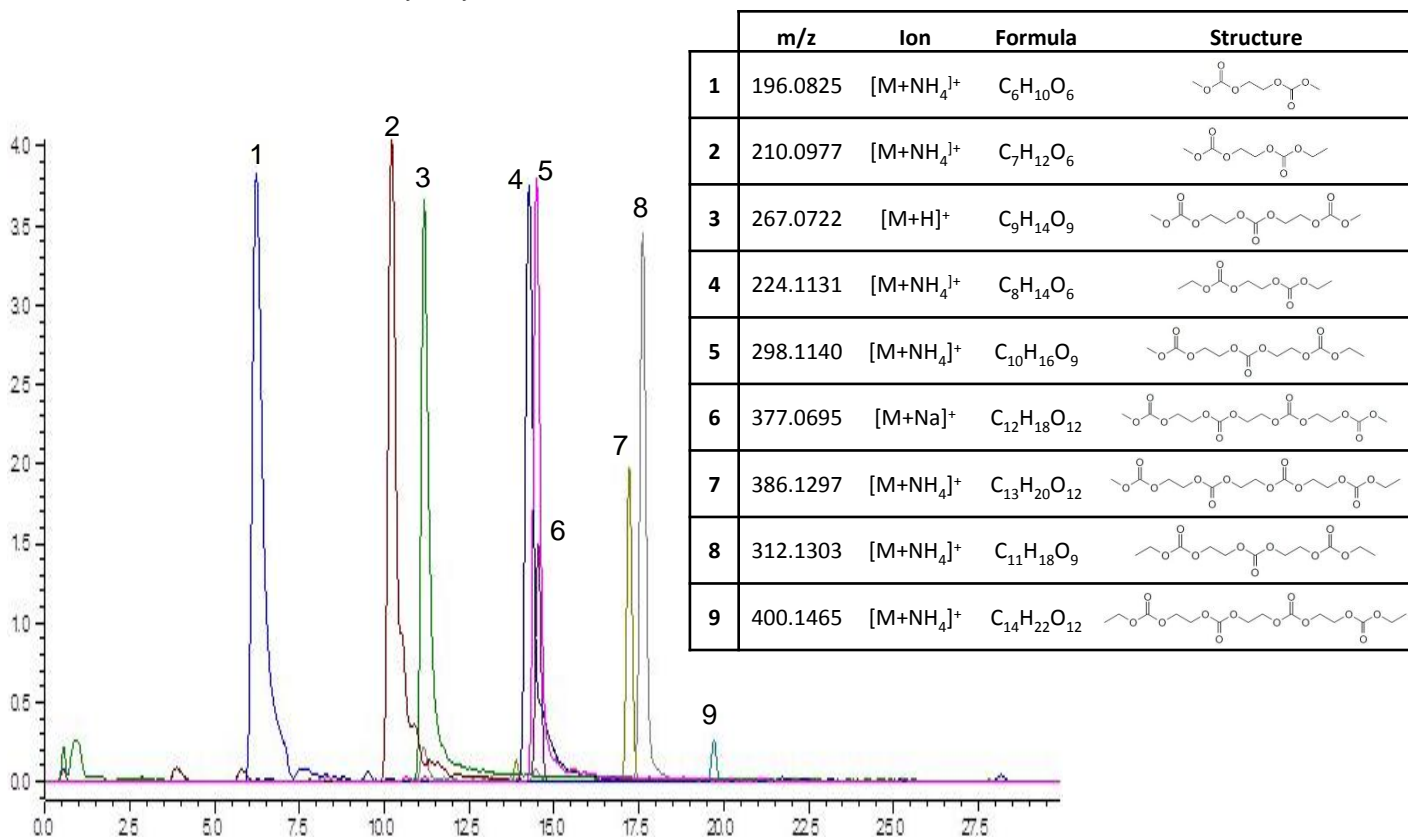
Conditions

Column: ACE Excel 2 C18-Amide
Dimensions: 100 x 2.1 mm
Part Number: EXL-1012-1002U
Mobile Phase: A: 0.1% formic acid in H₂O
B: MeOH

Time (mins)	%B
0	2
2.5	2
25	55
28	90
30	2

Flow Rate: 0.4 mL/min
Injection: 1 µL
Temperature: 40 °C
Detection: Shimadzu LCMS-IT-TOF
Positive ion mode ESI, Interface probe voltage: 4.5kV

Carbonate-based electrolyte systems are commonly used in lithium ion batteries. This method uses LC-IT-TOF-MS for the separation and identification of the main products generated by aging of common organic carbonate-based electrolyte systems



Reproduced with permission of University of Munster, MEET Battery Research Center, Germany: Schultz et al., Analytical Chemistry 2016, 88(22), 11160–11168.

© 2017 ACT Ltd. All rights reserved. All products are available worldwide.