离子色谱-透析水中无机阴离子的测定

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摘要：本文使用离子色谱测定透析水中的无机阴离子，样品透析水及质控样品，测试目标离子为氟离子、硝酸根离子、和硫酸根离子，样品状态为液体，需将透析水通过 0.22μm 过滤膜后可提取目标离子。本次测定使用碳酸根体系测试系统，通过样品平行和质控水样测定执行本次试验。

关键词：离子色谱；透析水；无机；阴离子

Ion chromatography-Determination of inorganic anions in dialysis water

Abstract: In this paper, the inorganic anions in dialysis water, sample dialysis water and quality control samples were determined by ion chromatography. The test target ions were fluoride ion, nitrate ion and sulfate ion. The sample state was liquid, and the target ions could be extracted after dialysis water was passed through the 0.22μm filtration membrane. The carbonate system test system was used to perform this test by blank sample, sample parallel and quality control water sample determination.

Key words: ion chromatography; Dialysis water; Inorganic; anion

1 仪器设备

1.1 离子色谱仪（配有电导检测器）：瑞士万通 930；

1.2 自动进样器：瑞士万通/919；

2 色谱条件

色谱柱：阴离子分析柱 A5-150mm

淋洗液：3.6mM Na_2CO_3

流速：0.7mL/min

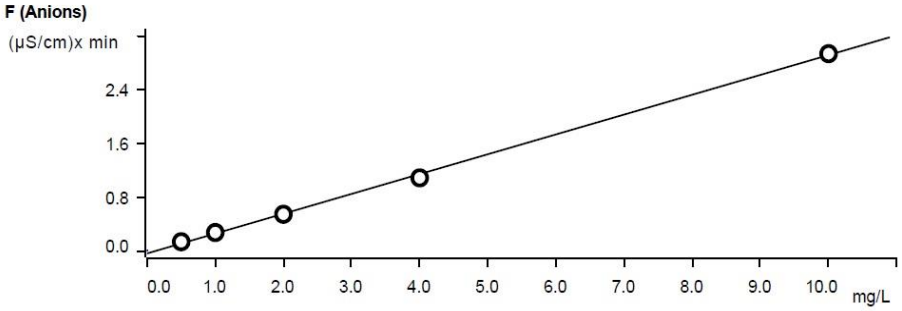
池温：35℃

柱温：35℃

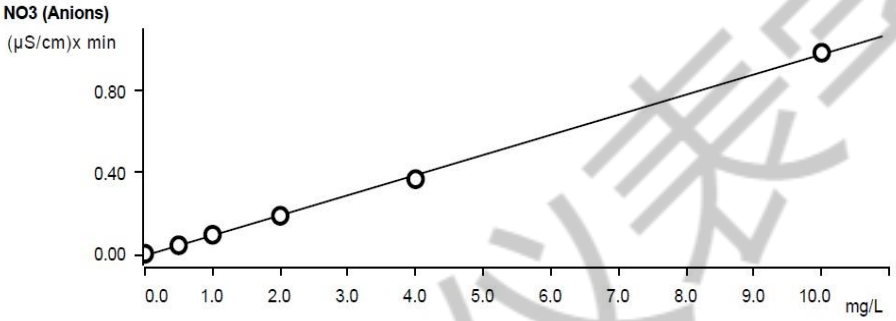
进样量：20μL

3 测试结果谱图及分析

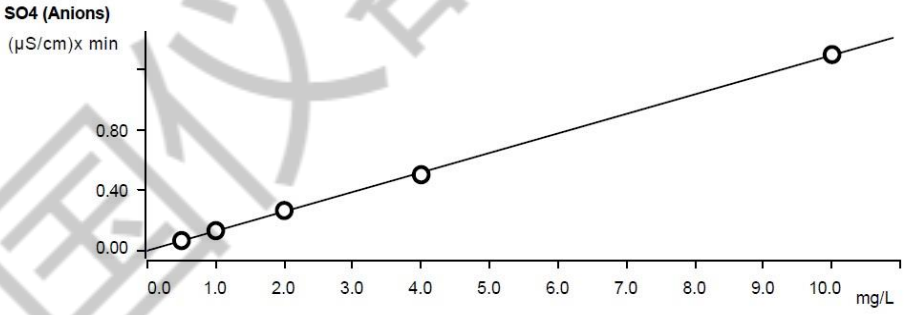
3.1 标准曲线



功能：. . . . . A = - 0.0482300 + 0.0148292× Q
相对标准偏差 . . . . . 3.970087 %
相关系数 0.999561



功能：. . . . . A = - 3.61223E-3 + 4.90382E-3× Q
相对标准偏差 . . . . . 4.182763 %
相关系数 0.999587



功能：. . . . . A = 1.30288E-3 + 6.44375E-3× Q
相对标准偏差 . . . . . 2.185756 %
相关系数 0.999853