

用最佳估计值得到的不确定度,而不必对每次测定的不确定度进行评估.本文提供了气相色谱外标法测定结果不确定度的评估模板.

参考文献:

- [1] ASTM D 3421 - 75, Extraction and Analysis of Plasticizer Mixtures from Vinyl Chloride Plastics [S].
- [2] 国家质量技术监督局计量司.测量不确定度的评定与表示指南[M].北京:中国计量科学出版社,2000.47 - 48.

Uncertainty evaluation of determination of plasticizers in PVC by gas chromatography

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Abstract: The uncertainty evaluation of determination of plasticizers in PVC by gas chromatography was proposed. Precision of the instrument, uncertainty of the certified values of standard reference materials used in the measurement, and uncertainty arising from the preparation of sample solutions were considered as main sources of the combined uncertainty. Expression of various propagation coefficients, component of uncertainty and the combined uncertainty were deduced and calculated. The determination of DEHP was taken as an example to illustrate the collection of various parameters and the method of calculation. The uncertainty and freedom were basically unchanged in a certain range of A_x value (peak area of the component to be determined). This uncertainty evaluation method can be a template to evaluate that of similar determination by using linear regressive standard curve.

Key words: uncertainty; gas chromatography; plasticizer

稀土系列氧化物超细粉末

广州有色金属研究院稀土室采用湿法沉淀工艺制备出稀土系列氧化物超细粉末.该粉末纯度 99.00% ~ 99.99%,粒度分布窄,粉末晶形单一,分散性好.

稀土氧化物超细粉末与常规粉末相比,在物理、化学性质上具有优异的特性,已被广泛应用于高科技材料之中.例如:在 PLZT, PTC 电阻元件中添加 Y_2O_3 , Sm_2O_3 , Nd_2O_3 等纳米粉末; CeO_2 纳米抛光粉; 催化剂载体; 固体燃料电解质; 氧传感器; FED, PDP 荧光粉 ($Y_2O_3:Eu$); 超导材料; 先进结构陶瓷材料等.