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3.2.3. Ejection from the Needle; 3.3. Conclusions Regarding Optimized Injection; 4 . How Much is Really Injected?; 4.1. Interpretations of ""Sample Volume""
4.2. Communicating ""Sample Volumes"4.3. Effects on Quantitative Analysis; 5 . Syringe Needle Handling Minimizing Discrimination; 5.1. Definitions of Techniques; 5.2. Experimental Determination of Losses in the Needle; 5.2.1. Method with Two Instruments; 5.2.2. Experiment with a Single Instrument; 5.2.3. Test During Routine Analysis; 5.3. Comparison of Needle Handling Techniques; 5.3.1. Filled Needle Injection; 5.3.2. Slow Injection; 5.3.3. Cool Needle Injection; 5.3.4. Hot Needle Injection; 5.3.5. Solvent Flush Injection; 5.3.6. Air Plug Injection; 5.3.7. Sandwich Injection
5.4. Heating the Needle after Injection?5.5. Effect of Injecting Air; 5.5.1. Concerns Regarding the Column; 5.5.2. Detectors; 5.5.3. Oxidized Sample; 6 . Dependence of Discrimination on Sample Volume; 6.1. Experimental Results; 6.2. Discussion of Mechanism; 6.3. Conclusions; 7 . Solvent and Solutes; 7.1. Volatility of the Solvent; 7.2. Type of Solute; 7.3. Adsorption in the Syringe Needle; 7.4. ""Memory Effects"" Arising from the Syringe; 8 . Injector Temperature; 8.1. Imposed Temperature; 8.2. Temperature Gradient Towards the Septum; 8.2.1. Critical Rear of Needle
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10.5. Evaporation in the Injector

Sommario/riassunto

This comprehensive and unique handbook of split and splitless injection techniques has been completely revised and updated. This new edition offers:- New insights concerning sample evaporation in the injector- Information about matrix effects- A new chapter on injector designThe real processes within the injector are for the first time visualized and explained by the CD-ROM included in the book. Furthermore the reader will understand the concepts of injection techniques and get a knowledge of the sources of error. The handbook also includes many practical guidelines.<br