Requirements for Selection and Pretreatment of Sample Bottles for Ion Chromatographic Analysis of Snow and Ice Samples

Selection and pretreatment of sample bottles is one of the key steps to ensure the experimental results in the analysis of trace chemical components in snow and ice samples by ion chromatography. [Commercial square cube ice maker machinery price](#)

Two points should be paid attention to in the selection of sample bottles: first, the material of bottles should be selected according to the characteristics of the samples and the chemical properties of the components tested; [Microwave sterilization machinery and equipment](#)

and polyethylene (PE) which is easy to transport and preserve should be selected for testing conventional anions and cations. Plastic sampling bottles made of polypropylene (PP), polypropylene and other materials; when testing organic acids, glass bottles are usually chosen to avoid the contamination of samples by the bottles themselves; secondly

to ensure the tightness of the selected sample bottles, different cleaning processes should be adopted to ensure the accurate determination of trace chemical components in snow and ice. Plastic bottles are first washed after soaking in detergent for 6-8 hours, and then soaked in distilled water for 24 hours. After fully rinsing, the glass bottles were soaked in 18.2M super pure water for 12 hours and washed until the blank test was qualified;

the glass bottles were first rinsed with tap water after 6-8 hours soaking with detergent, then rinsed thoroughly after 48 hours soaking in 1%-2% hydrochloric acid solution or chromic acid solution, then rinsed with distilled water for 24 hours, fully rinsed, and finally soaked in 18.2M super pure water for 12 hours and rinsed until the blank test was qualified. In the process of sample collection and transportation,

we must reserve blanks to check whether the bottles are systematically contaminated during the whole process from shipment to return to the laboratory, and do a good job of quality control in the whole process.