

May 5, 1977

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
SOURCE TEST LABORATORY PROCEDURE 4
DICHLOROMETHANE EXTRACTION OF FILTERS

I. Principle

The weight of inorganic solid particulate collected on a filter is determined after extraction using dichloromethane.

II. Equipment

1. An analytical balance to weigh weighing dish ± 0.1 mg.
2. Soxhlet extractor.
3. Oven to maintain $105^{\circ} \pm 5^{\circ}\text{C}$.
4. Desiccator.

III Reagents

1. Dichloromethane (CH_2Cl_2) Nanograde (or equivalent).
2. Cellulose extraction thimble (or equivalent).

IV. Procedures

Pre-extract thimbles in a soxhlet apparatus for at least two hours. Place preweighed filters in the thimble and dry at 105°C for at least four hours. Desiccate until cool and weigh to constant weight. Extract in a soxhlet extractor for at least six hours and repeat drying and weighing procedures. Run a blank for at least every series of the analysis, or every five samples.

V. Calibration

The balance should be zeroed before each weighing and calibrated at least every eighteen months with an NBS standard.

VI. Calculations

The weight of the extractables is the difference between the initial and final weight of the thimble and filter, and the weight of the solid inorganic particulate is the weight of the total particulate minus the extractables.