PLAINTIFF'S EXHIBIT

UC-5215

#19

EQUIPMENT FOR SAMPLING AND COUNTING ASBESTOS FIBERS

(February 19, 1973)

According to the OSHA regulations issued June 7, 1972: "All determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method at 400-450X (magnification) (4 millimeter objective) with phase contrast illumination."

Following is equipment which can be used to comply with the above, and its approximate cost:

M.S.A. Portable Pump Model "G" complete with battery charger - M.S.A. Cat. #456252 Mine Safety Appliances Company, Pittsburgh, PA	$200.00
Field Monitor Aerosols, package of 50 Millipore Cat. # MAWP 037A0 Millipore Corporation, Bedford, MA	$ 33.00
Filters & Pads, 0.8μm pore size 37mm diameter package of 100 Millipore Cat. #AAWP 03700 Millipore Corporation, Bedford, MA	$ 18.50
Adapters, Hose end for 1/4" tubing to male leur slip, 1 dozen B&D Cat. #LH/L Becton, Dickinson & Co., Rutherford, NJ	$ 4.20
White, Opaque, Cellulose Bands 41 x 25, approximately 1000 Jelly Cat. #28 Walter H. Jelly Company, Franklin Park, Ill.	$ 22.00
Soap Film Flowmeter, 2000 ml (for pump calibration) S.K.C. Cat. #307-2000 S.K.C. Inc., Pittsburgh, PA	$ 40.25
(DI)Methyl Phthalate - 1 quart, Cat. #D-65	$ 3.00
(DI)Ethyl Oxalate - 1 quart, Cat. #E-161	$ 4.30
Micro Slides, 25mm x 75mm x 1mm - 1 gross, Cat. #12-550-A	$ 2.36
Micro Cover Glasses 18mm^2 x .18mm - 1 oz., Cat. #12-520-A	$ 1.81
Balsam Bottle, 45ml - 1, Cat. #3-082 Fisher Scientific, Rochester, NY	$ 1.50
Porton Reticle - 1, Cat. #30084	$ 17.50
10X Huygenian Eyepieces - 2, Cat. #30128 Edmund Scientific, Barrington, NJ	$ 14.84
Other materials such as scalpels, tweezers, tubing, etc. are readily available in most localities.	
Approximate cost before microscope =	$370.00

Union Carbide trial exhibit UC-5215: Equipment for Sampling and Counting Asbestos Fibers, Equipment List with A... Published by AsbestosClaims.Law
ACL Doc 19696 · Page 1 of 2 asbestosclaims.law/library/19696/1

There are many types of phase contrast microscopes available and they should be selected to fit the particular needs of the individual laboratory. Some laboratory microscopes can be adapted to phase contrast simply by purchasing phase contrast objectives and a phase contrast condenser. Phase contrast microscopes can be purchased from most microscope manufacturers, they range in price from approximately $600 to $2500.

The list of suppliers is not necessarily endorsed, but could serve as a guide for purchasing the equipment.

The method for utilizing the above equipment is described in "Equipment and Procedures for Mounting Millipore Filters and Counting Asbestos Fibers by Phase Contrast Microscopy", by S. G. Bayer, R. D. Zummalde and T. A. Brown, Bureau of Occupational Safety and Health, 1014 Broadway, Cincinnati, Ohio 45202.

Union Carbide trial exhibit UC-5215: Equipment for Sampling and Counting Asbestos Fibers, Equipment List with A... Published by AsbestosClaims.Law
ACL Doc 19696 · Page 2 of 2 asbestosclaims.law/library/19696/2