

ASBESTOS

CHEMICAL TRAINING SHEET

(TO BE USED WITH OSH 24 VIDEOTAPE)

CHEMICAL NAME: ASBESTOS

There are several types of asbestos, but the most used type is chrysotile. Other varieties are crocidolite, amosite, anthrophyllite, and tremolite.

LOCATION OF

CHEMICAL ON PLANT: Asbestos is present as a pipe and/or vessel insulation in (name specific areas). It is also present in Transite and some gaskets. Wherever possible, other materials are substituted for asbestos at our plant.

HEALTH EFFECTS:

Asbestos fibers are carried into the body as airborne particles. These fibers are like fine glass slivers and can become embedded in the tissues of the lungs and digestive system.

Many years of exposure to airborne asbestos fibers may lead to scarring of the lungs (asbestosis) or to various kinds of cancer. Smoking greatly increases the occurrence of lung cancer among asbestos exposed persons.

RELEVANCE OF
MEDICAL EXAMS:

The chest x-ray given as a part of our normal physical exams are screened by a radiologist for signs of lung cancer or asbestosis. Also, the lung function tests are useful in determining if any obstructions are present. If you think you have been exposed to asbestos fibers over the legal limit (see below) check with Medical.

APPLICABLE
STANDARDS AND
EXPOSURE
MONITORING
RESULTS:

Asbestos is heavily regulated. The OSHA regulation 29 CFR 1910.1001 sets an 8-hour time weighted average limit of 2 fibers (>5µ) per cubic centimeter of air and a ceiling limit of 10 fibers/cc.

5µm

DUP 0912933

DU 030021

EPA requires notification if certain amounts of asbestos insulation are to be removed.

Du Pont's engineering standard S4T summarizes the legal requirements and gives handling requirements. Also, our Industrial Hygiene Procedure No. 10 covers asbestos handling on the plant.

(Discuss area monitoring results)

PROTECTIVE &
CONTROL MEASURES
USED:

The best control measure being used for asbestos is its steady removal from the plant pipes and vessels and replacement with non-asbestos insulation. Among the other controls used are thorough wetting, respirators, special clothing, and barricades. See I/H #10 for specific rules.

EMPLOYEE
RESPONSIBILITY:

It is the responsibility of each employee who works with asbestos to become familiar with its properties and with the information provided about it. Also, the rules for proper handling should be followed meticulously.

NEW RELEVANT
INFORMATION:

(Discuss as applicable)

DUP 0912933.001

Developed 7 - '82

DU 030022

ASBESTOS AIR SAMPLING

Reference: NIOSH Analytical Method #P4CAM 239

Filter Preparation

Clean 3-section styrene plastic cassette (37 mm)
Back up pad
Millipore AAWHP .8 μ MCE filter (37 mm)

1. Disassemble cassette.
2. With tweezers, place back up pad on cassette bottom.
3. With tweezers, place filter on top of back up pad.
4. Reassemble cassette.
5. Seal cassette tightly with black tape around the joint between the bottom and central sections.
6. Make sure both plastic plugs are in place.

Sampling

1. Use high flow personal sampling pump calibrated between 1.0 to 2.5 Lpm.
2. Remove bottom plug from cassette and attach to pump tubing.
3. In area to be sampled: place pump in area or on person.
4. Remove top section of cassette using coin or screwdriver.
5. Clip or attach cassette open face downward.
6. Turn pump on and note time and/or count.

Later

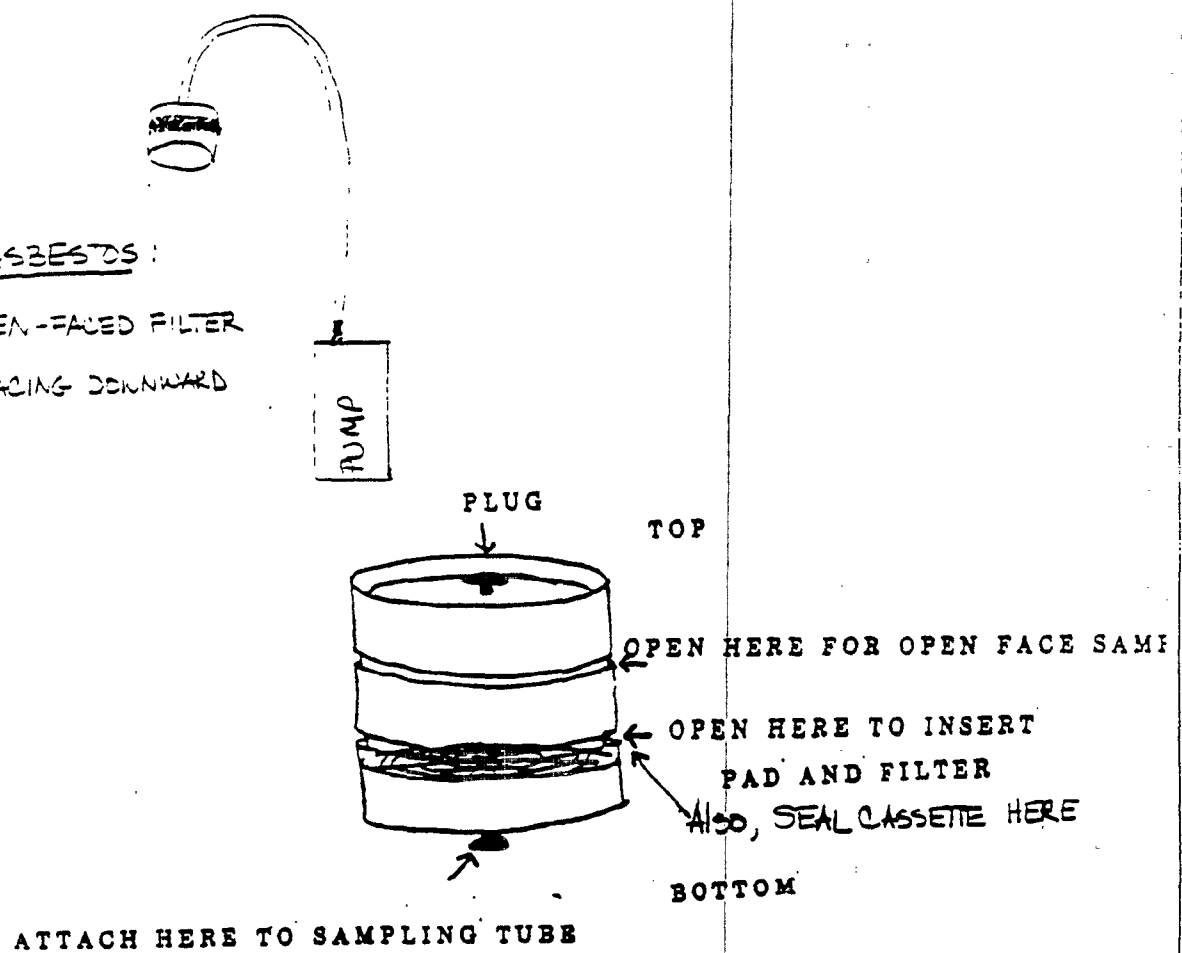
7. Turn pump off and note time and/or count.
8. Immediately replace top section of cassette.

DUP 0912934

DU 030023

FOR ASBESTOS:

OPEN-FACED FILTER
FACING DOWNWARD



MILLIPORE FILTER CASSETTE

DUP 0912935

DU 030024

