

Asbestos Airborne Fiber Sample Calculations

$$\text{Fiber Density (fibers/mm}^2\text{)} = \frac{F / f_{(\text{sample})} - F / f_{(\text{blank})}}{MFA}$$

$$\text{Fiber Concentration (f/cc or f/ml)} = \frac{[F / f_{(\text{sample})} - F / f_{(\text{blank})}] * ECA}{1000L * MFA}$$

F = Fibers

$f_{(\text{sample})}$ = field sample

$f_{(\text{blank})}$ = field blank

L = Volume in Liters

ECA = Effective Counting Area (385 mm²)

MFA = Microscopic Field Area or Graticule Area (typically 0.00785 mm²/field)